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DETROIT MEDICAL JOURNAL

The Practitioner's Monthly

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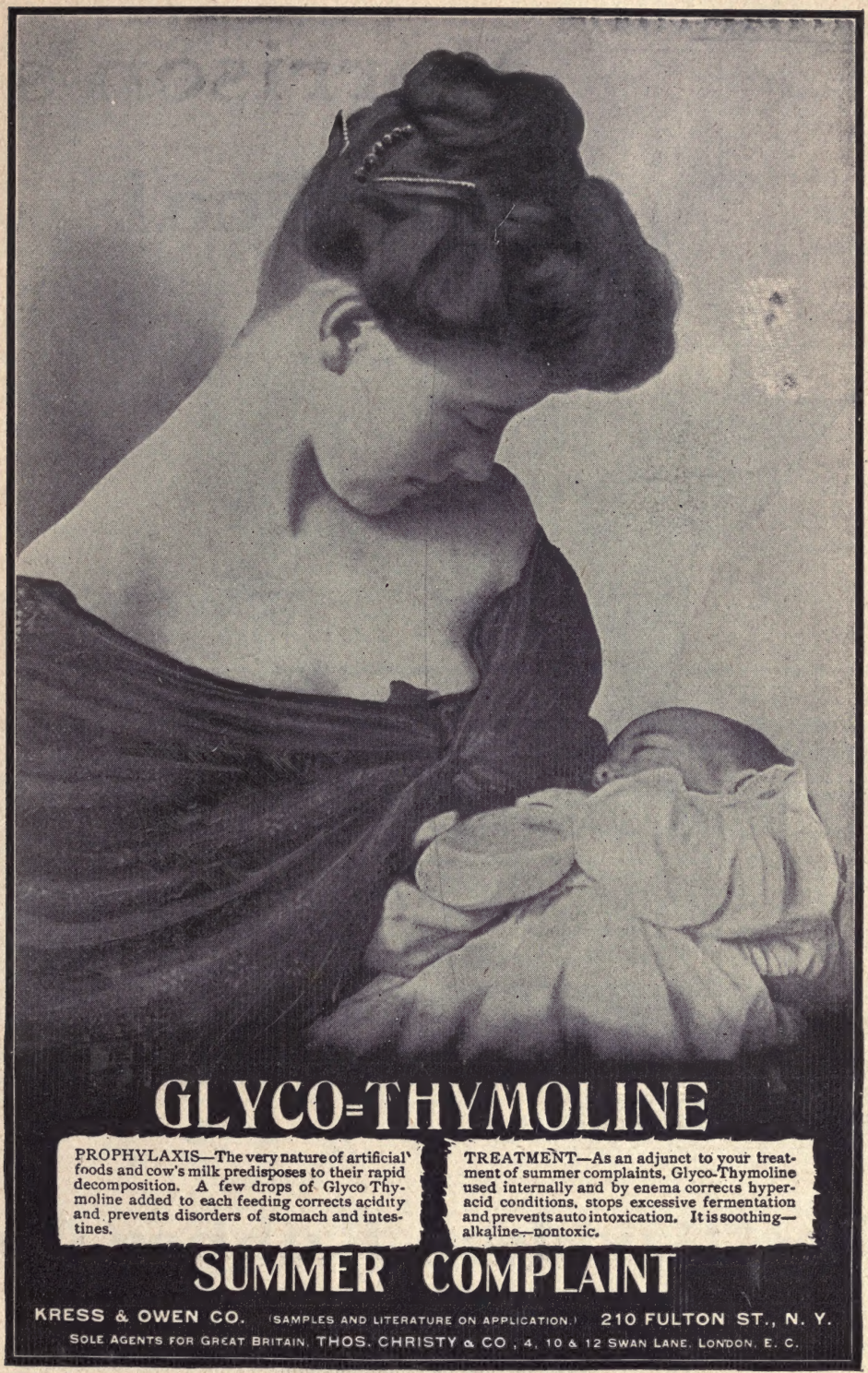
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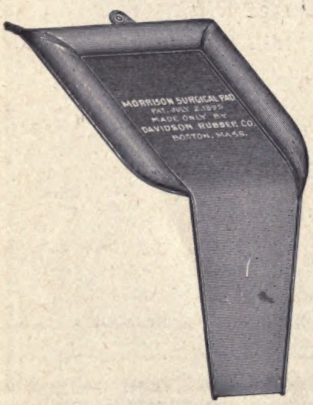

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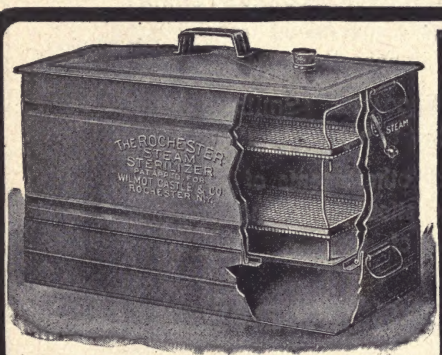

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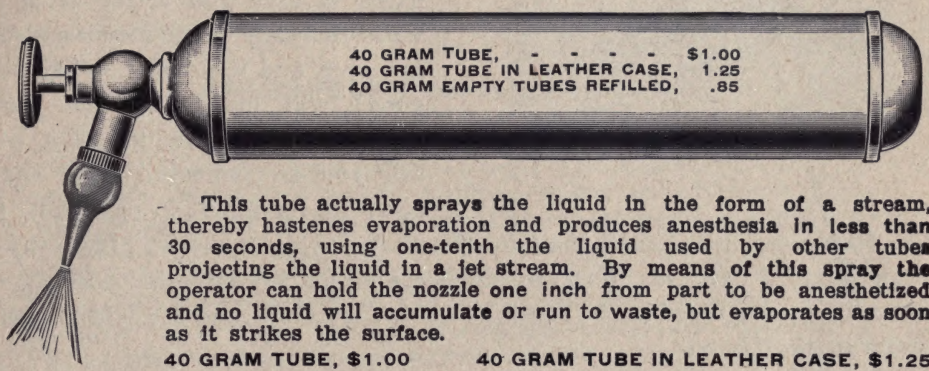

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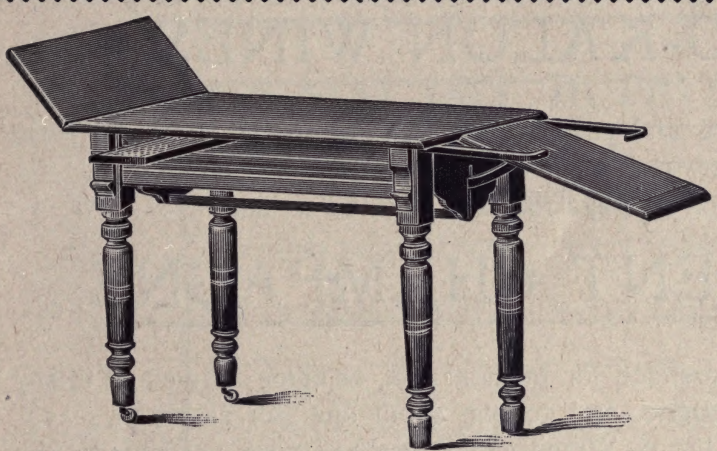

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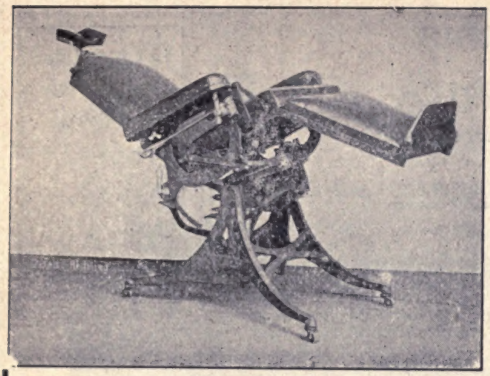

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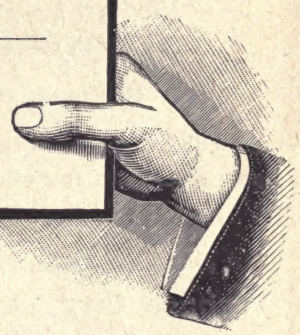

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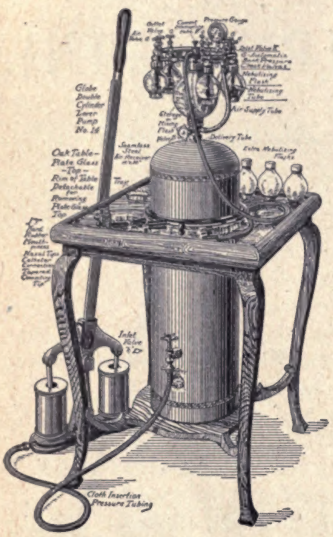

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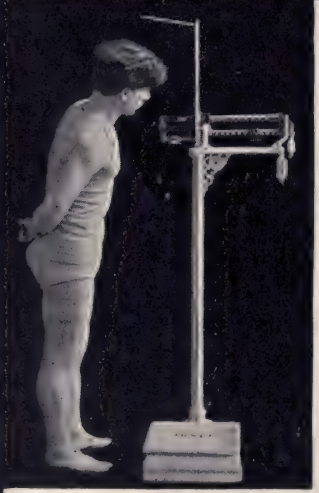

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THE DETROIT MEDICAL JOURNAL.

VOL. V. JULY, 1905. NO. 4.

THE MEDICAL SUPERVISION OF SCHOOLS AND THE PROGRESS OF SCHOOL HYGIENE.*

By CHARLES GOODWIN JENNINGS, M. D.,
Detroit, Mich.

Since we last met Christopher has departed from our councils. As a physician, as member, councilor and president of this society, his geniality, intense humanity, and sturdy, broadly cultured mind placed him in the front ranks of the pediatrists of this country. His early end has left a place in our professional lives that is not easy to fill, and we cannot but pause to express our profound sorrow and regret.

In his presidential address last year, my distinguished predecessor, Dr. Caille, called the attention of the Society to the necessity of broadening the scope of its labors and of taking cognizance of public questions that relate to the hygiene and pathology of childhood. While, as shown by its proceedings, the activities of this Society have been rather closely confined to the investigation of the problems of the pathology and therapeutics of early life as they relate to the individual, its position as the representative association of this continent for the study of pediatrics demands that it should speak with its authority on the broader subjects connected with the hygiene of child life, on which the physical well being of the race, and even our existence as a nation depends.

Following the suggestions of Dr. Caille, the president addressed to each member of the Council, whose duty it is to formulate the work and policy of the Society, a communication asking for suggestions as to the advisability of an effort to increase the power and usefulness of the Society, and asking for topics for discussion, etc. While some were encouraging, the general tone of the replies was such as to give the impression to the president that the Council was satisfied with the work of the Society in the past and that no radical changes were desirable. I still believe, however, that Dr. Caille's conception of the field of usefulness of the Society was right, and that future administrations should direct its efforts to the fulfillment of it.

Among other questions considered in his address, Dr. Caille adverted briefly to the subject of school hygiene and school inspection.

As one of the commissioners of the Department of Health in the city of Detroit, my duties have compelled me to keep informed upon the development and progress of medical inspection of school children. I believe the importance of the subject justifies its further and fuller con-

*Presidential address delivered before the American Pediatric Society, Lake George N. Y., June 19, 1905.

sideration by the Society, and I therefore ask your attention today to: The Medical Supervision of Schools and the Progress of School Hygiene.

Although Herbert Spencer and some of the ablest thinkers of our time have contested the right of the state to impose its system of culture upon the citizen, it has become a political axiom in the United States and many of the states of Europe that the government is responsible for the education of its citizens. Here and in Europe the common school has become a fact in the development of state socialism. Compulsory education is a settled state policy in the United States.

Forgetful of the importance of character formation and still more forgetful of physical development in childhood, the attention of the state and of educators has been concentrated upon the small part of child education, the development of the intellectual capacity.

The compulsory removal of all children from the influence of home life and their segregation in school rooms for from five to six hours a day to receive the intellectual training the state demands, imposes upon the state the secondary but not less important duty of a medical supervision that shall indicate their mental and physical ability to endure intellectual training, guard their physical and mental well-being during school life and discharge them physically and morally, as well as intellectually educated, and ready to take up their life work as the fathers and mothers of the next generation.

Medical officers of health and physicians in private work meeting as they do the disasters to child life that come from enforced exposure in schools to infectious disease, from the unsanitary environment of crowded school rooms and from the increased stress of life involved in the concentration of nervous effort at school work, are agreed that the time has come when children during school life should be protected from these dangers by adequate medical supervision. Before this Society of physicians familiar with the etiology of acute and chronic diseases of childhood it is unnecessary to mention in detail the pathological conditions directly and indirectly traceable to school life. It is equally unnecessary to emphasize the fact that the medical supervision of school children can be done only by medical men. The detection of the acute and chronic infections, of visual, auditory and other physical imperfections, of mental deficiencies and perversions, calls for systematic inspection by skilled physicians.

In this address I wish briefly to bring before you the work that has been accomplished in the interests of a safer and healthier school life, the trend of the work of the present time, and the possibilities of the future.

Naturally the most conspicuous danger of school life, exposure to the acute infections, was the first object of school inspection. With the attention of educators and parents, health officers and physicians directed to the subject, the necessity of amplification to a complete system of medical supervision of schools was gradually appreciated.

Medical inspection of schools had its beginning in Europe. As early as 1832 in Sweden, state regulation of school work was begun. The first

laws relating to school physicians and school inspection were passed in France in 1833. The present system of school inspection in Paris was adopted in 1884. Impelled by the increasing myopia in Germany, Cohn, in 1864, inaugurated school inspection by the examination of the eyes of over 10,000 school children. Russia appointed a physician to each secondary school since 1871. Belgium followed in 1874. In some cities or districts of most of the states of Europe, in Japan and in Egypt, medical inspection of some character has been begun.

Dr. Paul Schubert, of Nuremberg, in a recent monograph "Das Schulartz-wesen in Deutschland," has treated the subject of the school physician in Germany in a most exhaustive manner and clearly sets forth the excellencies and defects of the German system.

With characteristic seriousness and fully realizing the international importance of the subject, the German Union for School Hygiene, under the presidency of Professor Dr. Griesbach, called the First International Congress of School Hygiene which convened at Nuremberg April 4th to 9th, 1904. The Congress met under royal patronage and with the support of the various societies of Europe directly interested in the subject. The United States and Canada were represented by an organization of a president and twenty-six members, several of whom were present in person. The transactions are published in four large volumes and is a remarkable series of papers and discussions, covering the whole field of school hygiene. Upon invitation of Sir Lauder Brunton, representing the Royal Sanitary Institute of Great Britain, the Second Congress will be held in London in August, 1907. The influence of this Congress has been of inestimable value in collecting and rapidly disseminating the facts and theories of school hygiene.

"In England the system has so far spread that already there is a Society of Medical Officers for Schools; the larger school boards provide for medical attendance and their teachers and pupil teachers, for the regular visiting of their schools, for the dovetailing of medical school inspections with the regular work of the public health organizations, and, generally, for the discovery of infection among school children and the prevention of infection by detailed examinations of school premises. In many public schools, more especially where a boarding system is in force, medical inspection has gone further. Such schools retain the services of a medical officer, whose duty it is to examine all pupils admitted, to ascertain their fitness both for the mental work of the school and for the physical training required, to attend any cases of illness that may arise, to arrange for the isolation of infectious diseases, either within premises provided by the school or in the hospitals of the local authorities, and to report, from time to time, to the governor any circumstances that may imperil the hygienic safety of the children. In the industrial schools, too, which are under the control of the Home Office, the managers appoint a medical officer whose duty it is to attend any cases of sickness and to exercise a general supervision over the health of the school children. In many other schools, even where medical practitioners are not retained, it has become the custom systematically to measure,

weigh, and examine all the pupils admitted and, from time to time, all pupils in attendance." (Mackenzie.)

The works of Carpenter and Arthur Newsholme, the text-book of Mackenzie, the writings of Kerr, Clement Dukes, Chisholm, Lauder Brunton and numerous physicians, educators and philanthropists, and, above all, the Conference on School Hygiene organized by the Royal Institute of Hygiene in February of this year, reveal the fact that the people of Great Britain are fully alive to the national importance of this question.

Medical inspection of schools in the United States has been slow of adoption and limited in its application. The diffusion of authority in municipal government, the occasional unfortunate introduction of partisan politics into educational administration, the democratic reluctance to the endurance of parental measures of restraint, all have had their influence to delay the general adoption of medical supervision of school children. Again, only in the last few years has the density of urban population increased to the extent that the necessity of medical control of the aggregations of children in the common schools became apparent.

Boston introduced the first system of medical inspection of schools in 1894. New York followed in 1897. To assure themselves of the value and necessity of a system of inspection, the boards of health of New York and Boston conducted a series of preliminary investigations. To the members of this Society familiar with the modes of transmission of the infectious diseases, it is unnecessary to detail these investigations. They were made to assure administrative and legislative bodies and to demonstrate to them facts of common medical knowledge.

Chicago, Philadelphia, St. Louis, Washington, Detroit and many of the smaller cities of the United States, have followed the lead of Boston and have adopted systems of medical school inspection.

With some exceptions, medical inspections of schools in the United States has had for its object only the detection and exclusion of the infectious diseases. It has been a measure originated and carried on by boards of health for the prevention of the spread of the contagious diseases of childhood, and until boards of education have adjusted themselves to this new duty it will remain a department of health administration.

In all probability the medical inspection of schools should be under the control of the Board of Education. It should be a department of the school system and only related to the board of health, as the two bodies may be of mutual benefit in performing their respective functions.

Whenever in the United States medical school inspection has been established, health officers have been quickly and fully convinced of its value in protecting the health and lives of children and in diffusing a knowledge of the principles and practice of preventive medicine. The value to a community of a system that has for its object only the exclusion of pupils suffering from contagious diseases, is well illustrated by the records of the Department of Health of Detroit. From the beginning of the school year in September, 1904, to June 1, 1905, there were

examined by the medical inspectors 24,096 pupils. Of these 1,678 were found to be suffering from the various communicable diseases, as follows:

Scarlet fever	17
Diphtheria	21
Measles	21
Mumps	28
Varicella	91
Roetheln	1
Pertussis	4
Tonsillitis	570
Contagious skin diseases and miscellaneous diseases	942

Reports from other cities show similar results. Regardless of such evidence that should be convincing, and like all measures for the protection of the community at the inconvenience of the individual, the medical inspection of schools has met with abundant opposition and sometimes from unexpected quarters. A very recent editorial in a conservative and influential daily paper of Detroit, well illustrates the need of public education in the value of preventative medicine. Speaking of the medical inspection of schools this writer said: "It cost the taxpayer last year $2,500 for this perfectly useless service, a service that would be ridiculous were it not an abominable and intolerable piece of impertinence." It is almost pathetic to contemplate the state of mind of one who can designate as impertinent the protection by a department of health of hundreds of children from exposure to dangerous contagious diseases. It is gratifying to note, however, that with only an occasional exception medical school inspection has been received with approbation by boards of education, teachers and intelligent citizens.

Up to the present the medical supervision of schools has not been considered seriously in the United States by national bodies. The United States Bureau of Education has published in the reports of 1898 and 1902 chapters reviewing the progress of medical inspection of schools in this country and abroad. In educational bodies desultory discussions have arisen from time to time, and in 1898 at the meeting of the Department of Superintendence at Chattanooga, a Committee on School Hygiene was appointed with the United States Commissioner of Education, W. T. Harris, as Chairman. This Committee made a preliminary report the following year, giving the deplorable conditions existing in the public schools of this country and calling for the enlightment of school boards, teachers and others regarding the subjects of school hygiene and sanitation. Although the report of this Committee revealed the urgent need for an organized movement for the improvement of school sanitation and hygiene, no action was taken on the recommendation included in it.

The Section of Nervous and Mental Diseases of the American Medical Association, at the Session of 1903, appointed a committee to inquire into the relation of school methods to school diseases. The members of

the committee, Dr. W. J. Herdman and Dr. H. McBride, reported to the Section at the session of 1904, and their report is published in the Journal of the American Medical Association, April 15th, 1905. The report embodies a brief review of the progress of medical inspection with comments, and this conclusion:

"In the opinion of your committee, the American Medical Association should place itself on record as advocating and urging the inauguration of a thorough and systematic medical inspection of public schools and school children in every section of this country:

"1. In the interests of public health, since it is a potent means for detecting and preventing the spread of contagious and infectious diseases.

"2. For the purpose of securing to the child, while in attendance on school, the most favorable hygienic and sanitary conditions.

"3. For the purpose of getting exact knowledge regarding the physical and mental capacities of each child, in order that the methods of instruction may be intelligently directed to meet individual needs.

"Thus far it would seem we can safely go in support of what the most enlightened and progressive educators are seeking to accomplish, and in this effort they should receive from this national organization hearty endorsement and assistance, as they have in many localities from its individual members."

The American Academy of Medicine has appointed a committee to investigate the teaching of hygiene in the public schools. Papers have been presented and the Academy is earnestly endeavoring to advance the progress of a reform movement.

Thus it will be seen that the beginnings of a medical supervision of school life have brought to medical men and others a realization of its importance in the physical development of the race. Although at the present time efforts are confined almost exclusively to the discovery and exclusion of infectious diseases, a start has been made toward the development of a complete system of physical inspection. Chicago is studying the physiology and pathology of the school child. New York is beginning an investigation into the physical and mental condition of school children that is revealing a state of physical imperfection that would be startling were physicians not already too familiar with it. Of 7,166 boys recently examined by the medical inspector, 3,132 were found in need of medical attention. Six hundred and fifty of these showed defective mental development. The future will undoubtedly see the elaboration of medical school supervision until the whole period of school life is subject to a watchful care that will ensure education in its highest sense—the development of the entire mental, moral and physical faculties of childhood and youth.

Physical Education. "The character of a nation, as of an individual, is mainly dependent upon the completeness of the mental and moral education of its young; while the vigour and enterprise of a nation are based upon their physical training during the period of growth. No education is of permanent value which sacrifices Health at its altar.

"The school motto must ever be, "the greatest health of the greatest

number." The most sensitive test of a system, a school, or even a neighborhood is the health, disease, and death-rate of the young whom it nurtures. To enable them to attain a bare existence is a grave neglect of social duty: to ensure their thriving is our bounden obligation. It is mainly during the years of school life, when its material is plastic, that a sound constitution can be produced, and a tendency to hereditary disease eradicated."

In Great Britain the startling announcement of the committee on the physical deterioration of the nation has been promptly followed by extensive inquiries into the physical conditions of school children in London, Edinburg, Aberdeen, Glasgow and Dundee. With its less crowded population this question has not as yet become an urgent one in the United States, but the rapidly increasing urban population has brought emphatically to the minds of physicians that the time is soon coming when the question of physical deterioration will here press for consideration as it now does in Europe.

From the conclusions of Clement Dukes in a paper read before the First International Congress of School Hygiene on "The Organization of Physical Education in Schools," I take the liberty of quoting:

"The exercise of the physical faculties of children is as important for their well being as mental and moral education. The development of these faculties is possible only during childhood."

"The physique of the next generation depends upon the physical education of the present, and physical education requires a similar organization to that of mental education."

While the question of physical training is important enough in the case of boys, it is of equal or greater importance in the education of girls. In boys the demand for exercise is spontaneous and irrepressible. Custom and false conceptions of physical grace hamper the whole childhood and youth of our women.

"The serious defect in schools for girls is the inadequate provision for physical education. Women should be strong, vigorous and healthy, yet no effort is made during the period of their active growth and development to make them so. Education of growing girls should not be at the expense of motherhood; we do not want crammed heads on undeveloped bodies."

"If girls are to receive a higher culture, it is their physical education which must precede any increase in their mental education. Without this the process cannot be safely effected; for the mental powers, too highly developed in women, involve a physiological cost which her feminine organization will not sustain without injury more or less profound."

Work and Sleep. Knowledge of the physiology of childhood emphatically reveals how seriously inadequate is the provision for brain rest in the whole scheme of school education. No attempt is made to adjust work and sleep to the physiological demands of the young, growing child. The work demanded of children in all grades is excessive and this with the coincident deprivation of exercise, play, rest and sleep is

accountable for the ill defined pathological conditions which medical men continually meet in childhood.

Clement Dukes has tabulated the hours of work and sleep requisite during youth and childhood, which is, in part, as follows:

The Hours of Work and Sleep Adapted to the Various Ages of Children.

Ages of Pupils.	Hours of Work per Day.	Hours of Sleep per Night.
From 5 to 6 years	1	13½
" 6 " 7 "	1½	13
" 7 " 8 "	2	12½
" 8 " 9 "	2½	12
" 9 " 10 "	3	11½
" 10 " 12 "	4	11
" 12 " 14 "	5	10½
" 14 " 16 "	6	10
" 18 " 19 "	8	9
" 16 " 18 "	7	9½

As examples of the excessive work demanded in the school life of today I will cite three cases taken at random, all suffering from the physical effects of brain fag.

Case 1. A daughter of wealthy parents in a private school for girls. School hours 8:30 o'clock to 12:30 o'clock. Continuous study or recitation with ten minutes recess at 11 o'clock. Luncheon 12:45 o'clock. German lesson and study 1:15 o'clock to 2:30 o'clock. Play from 2:30 o'clock to 4 o'clock. French or music 4 o'clock to 5 o'clock. A total of six hours per day of school work.

Case 2. A daughter of wealthy parents in a private school. The girl rose at 6 o'clock. Some hurried study with breakfast at 7 o'clock. At school from 8:30 o'clock to 12:30 o'clock with 15 minutes recess at 11 o'clock. Luncheon at 1 o'clock. Music and recitation 1:30 o'clock at 3:30 o'clock. Out until 6 o'clock. Dinner 6:30 o'clock. Study 7 o'clock to 10 o'clock. A total of nine hours of work, 1½ hours out of doors and eight hours of sleep.

Case 3. A girl of seventeen years in the high school studying for a teacher's position. The girl rose at 6:30 o'clock. Breakfast at 7:30 o'clock followed by hurried study. In school from 8:30 o'clock to 1:15 o'clock with 15 minutes recess for lunch. An indigestible lunch was often taken at recess. Dinner at 2 o'clock. Study from 3 o'clock to 6 o'clock. Supper at 6 o'clock. Study from 7 o'clock to 11 or 12 o'clock. A total of ten hours study, six to seven hours sleep and no recreation.

Food. Ignorance of the simplest facts of dietetics in homes and in boarding schools is responsible for many of the pathologic conditions of childhood. In addition to excessive work and long confinement with deficient rest and sleep, is a dietary improperly selected, badly prepared and often inadequate to the demands of the growing child for nutrition.

These are but suggestions of the problems that demand correction in school life. How correction is to be made is a question for the earnest thought and united efforts of physicians, educators and parents. There are difficulties to be overcome that now seem insurmountable but which with an aroused public sentiment may fade away.

With a thorough medical supervision of the school system by a medical department of the Board of Education, with the school developed into a laboratory, where teaching of hygiene is made practical by a perfect sanitary environment, will come a diffusion of a knowledge of the necessities of healthful living that will make reform a natural process of development.

A broad minded educator, (Henderson, "Education and the Larger Life") writing of the difficulties to be overcome in making over our primary schools, says:

"But the major difficulty, the one which may not in kindness be ignored, the one which prevents the humanizing of the lower schools, and vetoes many a wholesome, red-blooded experiments in education, is really this—when these children of good fortune, for such I must regard them, come, at fifteen years of age, to the door of the high school, they find it closed. They are not wanted. They do not know parsing and grammar and spelling and arithmetic and political geography and physical geography and history and civil government and physiology. They are simply strong and well, clear eyed and accomplished, inquisitive and earnest, full of power and promise. Comparing the two groups of utilities, the high school chooses the former. But often, it chooses with a sigh. What, then, is the excuse? It is the same excuse all along the line. The lower schools would be good if the high schools would let them, and the high schools would be good if the colleges would let them, and the colleges would teach the knowledge of most worth if the community would let them. Apparently it is a superior madness which drives us."

It may not be the province of this Society to introduce reforms in school hygiene or other departments of national sanitation. The objects and methods of its organization preclude this. It may and should be ready, however, with its exceptional knowledge of child pathology, to unite with national educational bodies, boards of health and similar public organizations, in movements directed to the improvement in the physical development and well being of the children of the nation. To this end a standing committee could be appointed with power to represent the Society in national conferences and international congresses for the study of school hygiene. Such a Committee would be the medium through which the special medical knowledge of the Society could be made available in the guidance of reform movements, and through it the Society kept informed of the development and progress of school hygiene.

Until the American Pediatric Society thus gives its aid to such problems of national development, it will have but partially fulfilled its duty to scientific medicine, and the welfare of the children of the nation.

457 Jefferson Avenue.

THE USE OF STERILE WATER AS A LOCAL ANESTHETIC.*

By LOUIS J. HIRSCHMAN, M. D.,
Detroit.

The discovery of cocaine and its use as a local anesthetic opened up a new era in minor surgery. The fact that a great many operations could be performed without pain and without the use of a general anesthetic was hailed by both profession and laity as a great surgical advance.

Cocaine, however, has its drawbacks. To some people, even in very small doses, it is very depressing, and its toxic effects in some cases, that have been reported, have resulted fatally. Of late years Eucaine B. has come into prominence as a substitute for cocaine as a local anesthetic, and is certainly a very useful and a very valuable drug. Eucaine lactate is freely soluble, can be sterilized by boiling, and its anesthetic effect is just as pronounced as that of cocaine. It has been discovered by experimenters along this line and writers on this subject, that injections of cocaine or eucaine into the tissues have been devoid of full anesthetic property unless distension of the tissues was produced. It was also observed that very weak solutions of anesthetic drugs seemed to act fully as well as stronger solutions of the same drugs, provided distension was secured.

Dr. Samuel G. Gant, of New York, in September, 1901, after observing that unless distension was produced anesthesia was wanting with the above named anesthetics, commenced experimenting with the injection of sterile water into the tissues to produce anesthesia. He found in the various operations on the ano-rectal region, when the tissues were distended with sterile water anesthesia was complete, and he was able to do a great many minor rectal operations without any other anesthetic agent whatever.

At the meetting of the American Proctologic Society in Pittsburg in May, of this year, Dr. Gant reported that he had performed over 600 operations under sterile water anesthesia. These operations included everything from simple divulsion of the sphincter to the fixation of the sigmoid to the anterior abdominal wall, and the doctor stated at that time that he does not, as a rule, use any other anesthetic agent for local anesthesia.

After some discussion of the matter with Dr. Gant, the writer upon his return from the above-named meeting started to employ the use of sterile water as a local anesthetic.

The author has been well aware of the dangers attending the administration of chloroform and ether and, while realizing their great value in making the success of major operations possible, he also has realized that even in the most skillful hands the general anesthetic sometimes has caused the death of the patient. Believing, therefore, that wherever an operation could be done under local anesthesia equally as

*Read before the Surgical Section of the Michigan State Medical Society, June 30, 1905 at Petoskey, Mich.

well as under the general anesthetic, local anesthesia should be used in all such cases. The unfortunate experience of one of his colleagues in the loss o fa patient from the administration of chloroform which was given for the removal of a single simple internal hemorrhoid, has helped not a little in the writer's resolution.

While the use of sterile water as a local anesthetic is not by any means recommended as a substitute for general anesthesia, in major operations; in the great number of minor surgical procedures where cocaine, eucaine, thyl chlodire. and other local agents have been employed, the writer is now fully convinced sterile water can be used with equal success and with no danger of toxic effects from the absorption of the anesthetic agent.

The technique of sterile water anesthesia is simple, and the method has the following advantages over the injection of cocaine: The anesthesia is instantaneous; no dangerous complications have been known to follow it, the after pain and hemorrhage seem to be less; there is no danger from absorption of the agent used; the only instrument needed is a hypodermic syringe, which can be sterilized by boiling; a fine needle, and boiled water, which can be procured everywhere.

In order to produce anesthesia it is necessary that the tissues should be fully distended. The method of procedure is as follows: The skin over the site of operation is grasped between the thumb and fore-finger and pinched and touched with a drop of pure carbolic acid. The needle of the hypodermic syringe, which is filled with sterile water (perferably warm) is thrust into (not through or under) the skin layer, and a small quantity of water is slowly injected. A white wheal will form and the injection is repeated along this whitened anesthetic area as far as is desired. For the simple opening of abscess or simple incision this is sufficient. If it is intended to go deeper, the needle is next plunged lower and injections carried on in a similar manner only throughout the different tissues overlying the structures which are to be operated upon.

Distension and anaemia of the part must be produced in order to secure a successful anesthesia. This anesthesia is apparently caused by the pressure upon the nerves and their endings and upon the blood vessels, of the fluid injected—thus causing an artificial oedema or anaemia. **This distension should be brought about slowly,** as too rapid injection of fluid into the tissues will cause discomfort, if not some pain, particularly in nervous individuals.

In proctology the use of sterile water marks a new era in rectal surgery. Internal and external piles, fissure, simple uncomplicated fistula, ulcer, prolapse and many other diseased conditions of the lower end of the rectum and the anal region can be relieved in the office or at the patient's home, absolutely without pain and without subjecting the patient to the worry and possible danger of a general anesthetic. The charlatan who long has advertised to cure piles and other diseases of the rectum without the use of the knife and without pain can be successfully competed with, and the so-called injection treatment of hemorrhoids can be surely relegated to oblivion.

The author has used this method within the last month in: explora-

tory laparotomy; inguinal colostomy; closure of artificial inguinal anus; suturing of a divided sphincter-ani; removal of internal hemorrhoids; removal of external and thrombotic hemorrhoids; fistula in ano; divulsion of the sphincter ani; division of the sphincter; in the removal of sebaceous cyst of the forehead; removal of tumor of scalp; removal of foreign bodies from the fingers; operation for ingrowing toe-nail; opening of abdominal and ischio-rectal abscesses; tapping of hydrocele; removal of tumor of the cheek, and the extirpation of a large thyroid tumor.

In none of the above operations was any pain felt except in two instances: In the closure of the artificial anus the anesthetic effect had worn off at the end of one-half hour and the placing of the skin sutures was felt by the patient, and traction on the mesco-colon was felt; in the removal of one of the sebaceous cysts the last suture in the skin was also felt.

In several of the rectal cases the patient did not know that the operation was being done, and in one instance in particular the patient, a nervous woman, absolutely refused to believe that anything had been done.

The author has used injection of sterile water in numerous cases to anesthetize the sphincter ani so as to allow immediate divulsion for the purpose either of making a thorough examination of the rectum or preparatory to operative proceedure in the rectal cavity. In no instance has the divulsion (which was accomplished immediately been unpleasant or painful to the patient. The point of injection to anesthetize the sphincter is half an inch posterior to the posterior commissure of the sphincter ani. The needle is passed upward and to each side in a V-shaped direction for one-half to three-quarters of an inch, keeping from one-half to five-eights of an inch from the anal opening. The distension at both points of the "V" will cause pressure upon those branches of the inferior hemorrhoidal nerves which supply the external sphincter.

The author has used this method of producing local anesthesia a sufficient number of times to be fully convinced that its further use by the profession in the lesser surgical procedures will prove a great assistance to both surgeon and patient, and to still further lessen the drawbacks and dangers, however remote, which have hitherto accompanied production of local anesthesia by the injection of drugs, and the administration of general anesthetics.

420 Woodward Avenue.

PERSONAL EXPERIENCE IN THE EMPLOYMENT OF MECHANICAL VIBRATION IN THE TREATMENT OF RECTAL DISEASES.

By WILLIAM L. DICKINSON, A. M., M. D.,
Saginaw, Mich.

Mr. President and Fellows:

It is only since our last meeting that I have been employing mechanical vibratory stimulation in the treatment of rectal diseases. While at

*Read before the American Proctologic Society, May 5 and 6, 1905, Pittsburg, Pa.

Atlantic City, Dr. Evans called my attention to the benefit derived from its use in giving immediate relief to inflamed and protruding hemorrhoids. This set me to thinking, and upon returning home, I procured Kirke's Handbook of Physiology, and Pilgrim's Vibratory Stimulation, and went to work to learn why and when one should employ this, to me, new physiological treatment in proctology. Having learned a few of the great number of facts to be acquired before one can expect to treat his patients intelligently, I had a machine installed in my office and began useing it, as I thought, secundem artem.

My first case was an irritable anal ulcer of one year's duration, and had the patient consented, I should have incised the ulcer, end to end, and trimmed away the indurated tissue, getting, in all probability, a good result, but, debarred from this trivial operation, recourse was had to the vibrator. The hard rubber ball vibratode was employed, over the 1st, 2d, 3d and 4th lumbar nerves, as these nerves control the anal sphincters. Pressure was made on each nerve for about twelve seconds, vibrating each one twice, a short stroke with four thousand blows per minute being used. In order to obtain the nerve endings in the ulcer locally, this small vibratode was lubricated with vaseline, and while in motion, (Oscillating), it was gently and carefully introduced into the rectum.

There was a little discomfort at first, but in a few seconds the patient said the treatment was painless. The duration of the treatment was three minutes and were given daily for five days, and then every second day for one week. There was applied to the anal verge, between the vibratory treatments, a five per cent. ichthyol ointment. The pateient was free from all pain after the second treatment. Of course, I was greatly pleased with the result obtained, and the three following cases yielded just as readily to vibratory stimulation; but my fourth was a very nervous person, afraid of the treatments, and objected to the noise of the motor. Six treatments were given as outlined, and not benefiting her in the least, a solution of Beta-Eucaine was injected, the fissure incised, and in a few days the patient was well.

In tight anal sphincters where dilation is necessary, it can be done by using this vibratode, employing five thousand short strokes per minute, gradually introducing the instrument. It has been my custom to take about one minute to introduce the vibratode to its full size, hold it in place half a minute, then gradually withdraw it, repeating this procedure three or four times, when the anal sphincters will be relaxed.

I have found this the preferable method today for gradual dilation of the anal sphincters, as it tones up the parts and relaxes the spasm. There is scarcely any pain, as by slowly introducing the vibratode, the nerves are anæsthetized. Stimulation of the third and fourth sacral nerves is very beneficial in some of these cases.

I have employed vibratory stimulation in a few cases of anal pruritus where I was unable to locate the exciting cause, but without benefiting the patient.

In my experience, the greatest field of mechanical vibratory stimu-

lation for the proctologist is in the treatment of chronic constipation, and here the results obtained are certainly remarkable. As constipation is often the result of faulty secretion and excretion of the stomach, liver and spleen, also of the small and large intestines, with a weakened or absent peristalsis, we turn our attention to each of these organs in its treatment. We stimulate the gastric glands through pressure on the vagi at the sides of the neck. Irritation of these nerves also produces contraction of the stomach, including the pyloric sphincter, hence the vagi are the motor nerves of the stomach. There are also spinal nerves reaching the stomach through the solar plexus, these nerves pass through the spinal cord in the anterior roots of the nerves from the 6th to the 12th dorsal, passing in the splanchnic nerves to the solar plexus, and hence to the stomach. (Kirke, page 367.)

The activity of the liver may be increased by applying over it interrupted vibration with moderate pressure and a medium short stroke, or by abdominal vibration and spinal stimulation. Dr. Snow, in her book on Mechanical Vibration, pages 214 and 215, says: "Professor Colombo, of Turin, demonstrated in respect to biliary secretion, that 'after ten minutes of trepidation (shaking or vibration) and of tapotement or percussion, the quantity of bile increased considerably in the next four hours. The cholesterin and the biliary soda salts were most abundant. After twenty-five minutes of friction and of petrissage the same results were obtained as after ten minutes of trepidation and tapotement; the maximum result was obtained by combining ten minutes of trepidation and tapotement with ten minutes of friction and petrissage."

The vaso-constrictors of the portal system are the third to the eleventh dorsal, the nerves of the hepatic artery are constrictors contained in the splanchnic, and dilators in both splanchnic and vagus. (Kirke.) From the third dorsal to the first lumbar, the motor nerves of the spleen are given off. The peristaltic movement of the intestines is increased by light stimulations of the vagi in the neck, while a heavy stimulation of the vagi would decrease the peristalsis. The colon, rectum and anus are supplied with nerves from the second lumbar to the fourth sacral. By stimulating these nerve centers, the peristalsis is increased, and the internal sphincter rendered patulous.

In conclusion, I would say that it is necessary to correct any errors in diet, to drink large quantities of water between meals, and at bedtime, and especially to refrain from taking any laxitive or cathartic medicine, as we wish to depend upon the physiological action of mechanical vibratory stimulation.

The technique is as follows:—First the patient lies upon the back with the knees well drawn up, thus relaxing the abdominal muscles. The breathing should be slow and deep. I employ the rubber brush attachment, making medium hard pressure. Begin at the ilio-cecal junction, and pass the brush slowly along the ascending, transverse and descending colon. Repeat this procedure four or five times. Lightly stimulate the vagi at the sides of the neck. Then have the patient turn over on the face, extending the arms upward and around the end of the table, thus

elevating the ribs. We now use the hard rubber ball attachment, medium stroke and pressure, from the fourth to the twelfth dorsal nerve. The impulse reaches the sympathetic through the posterior primary divisions of the spinal nerves and then along the rami-communicantes. The whole intestinal tract with the exception of the rectum will be influenced by this treatment. Stimulation of the rectum is made with the hard rubber ball attachment, quite heavy pressure and medium stroke, over the 3d, 4th and 5th lumbar, and 2d, 3d and 4th sacral nerves.

Treatments should be given daily until bowels move regularly, then every third day for two or three weeks. As we continue to use mechanical vibratory stimulation, and learn how and when to employ it, I feel confident that as proctologists we will consider it one of our most useful means in relieving and curing our patients.

917 Genesee Ave.

DR. METCALF'S CLINIC.

At Harper Hospital, December, 7th, 8th and 9th, 1904.

REPORT OF CASES—CONTINUED

Case VI. **Appendicitis, in which the appendix drained its contents through its distal extremity into the colon.** (Dec. 7th.)

Miss H., aet. 11. Family history negative. She has had three attacks of appendicitis. The first attack a year ago last summer, the second last August, and the present one about a month ago. In each attack the symptoms were classic; vomiting and severe pain in epigastrium soon becoming general over the whole abdomen, subsequently localizing itself in region of appendix. The last attack culminated in what appeared to be general peritonitis, which subsided, leaving an area of dullness about McBurney's point. A few days later a large quantity of pus was discharged per rectum. She still has pain and tenderness in the lower right abdominal quadrant, low nutrition, and extreme nervousness. Temperature normal, pulse 120. Operation, 1:15 to 1:45 p. m. Oblique incision through skin and fascia over McBurney's point, muscle fibres separated, and peritoneum incised. Omental adhesions were separated and appendix found pointing upward outside of colon, its distal point adherent to colon and perforated, as was also the colon wall at the same point. This condition accounted for the previous discharge from the rectum. The meso-appendix was clamped with forceps, the appendix was removed, and the stump inverted by a purse-string suture, which passed under the appendiceal artery, thus preventing subsequent bleeding into colon. The mesentery was ligated. The perforation in the colon was closed by continuous Lembert suture and the denuded surfaces covered by peritoneum. Highest temperature after operation, 99.8; highest pulse-rate, 96. She sat up on Dec. 16th, and left the hospital on the 18th, the eleventh day after operation. She made a rapid and complete recovery. The appendix was found, on microscopical examination, to contain a large supply of lymph-glands, a small-cell infiltration of moderate degree in the muscular wall, but more pronounced in the loose tissues of the meso-appendix. There was marked increase in thickness of the adventitia in its blood vessels.

When a competent surgeon is available, in all cases of appendicitis, before the beginning of peritonitis, the appendix should be removed. In the majority of cases when general peritonitis has developed, the surgeon should wait for its subsidence and a localization of the infection before resorting to operation. In the meantime no food should be given by the mouth and the vomiting should be controlled by irrigation of the stomach. Physic should not be given in such cases.

Case VII. **Dermoid cyst, symptomatically resembling ectopic gestation.** (Dec. 7th.)

Mrs. K., aet. 23. Wife of a Polish laboring man. Family history negative; menstruated normally at 14; married at 21. Has had 2 children, one still-born, and the other died when one month old. Had always been well except for nervous spells. Four weeks previous to entering hospital she had been seized with severe cramps in left inguinal region, with great distress in pelvis and lower abdomen. Entered Harper Hospital Dec. 2nd, with temperature 100.8 and pulse 120. Delirium was such that she required constantant watching. Marked tenderness and tension of muscles were noted over entire abdomen. The uterus was fixed, with a large mass apparently in the left broad ligament. The pains produced by the administration of cathartics or enemata suggested partial intestinal obstruction. Blood examination revealed a moderate leucocytosis and a slight reduction in hemoglobin. Operation, 1.45 to 3:30 p. m., disclosed the pelvic contents matted together, with small pus-pockets throughout. Intestines and omentum were extensively adherent to pelvic mass. The uterus was large and boggy; the tubes were filled with pus; the right ovary was the size of a small egg and contained several numerous infected cysts. There was a suppurating dermoid cyst of the left ovary, containing hair and other debris. The adhesions were freed and the intestine repaired where injured. The uterus and adnexae were removed. To assist drainage and to lessen subsequent formation of adhesions, the pelvic cavity was loosely packed with iodoform gauze, one end being pushed down into the vagina. The abdominal incision was then closed. Two days after the operation, the pulse reached 140, and the temperature 103. The gauze was removed through the vagina on the fourth day. The improvement was then gradual and she became rational, the temperature falling to normal on Dec. 14th, with a pulse of 100. Pathological report: Uterus. Relative increase of interstitial cells in mucosa. Fallopian tubes: Purulent salpingitis. Epithelial lining in a state of disintegration, especially in the right tube. Folds greatly congested. Muscular wall infiltrated with leucocytes. Right ovary. Hyaline degeneration. Graaffian follicle cysts. Corpus luteum. Thickening of arterial walls. Thick layer of loose connective tissue surrounding the ovary and containing fluid and leucocytes. On Dec. 17th, she began to cough; an area of consolidation appeared in the middle lobe of the right lung anteriorly; her temperature rose to 100. the pulse to 108, and the leucocytes to 18,000, with 82 per cent polymorphonuclear. Subsequently the temperature ran from 99 to 102, with pulse 100 to 110. The area of dullness increased and a few days later there was a large accumulation of fluid in the right pleural cavity. The husband would not permit aspiration, although he was told that the cavity was filling with pus, and no argument could overcome his fears and prejudices. January 8th, on his own responsibility, the man removed his wife from the hospital. At this time the patient had a temperature of 101.8 and pulse of 100. She died at her home Jan. 20th, refusing surgical aid. Throughout the case the husband blindly opposed our efforts to do for his wife. Early drainage of the pleural cavity would likely have saved her life. No autopsy was permitted.

Case VIII. Complete inversion of the uterus. (Operation, Nov. 11, 1904; exhibition of patient and specimen in clinic, Dec. 7th.)

Mrs. S., aet. 47. Family history negative. Menses at 14; regular and normal. Married at 18. Has 11 children. One miscarriage at 4 months, 10 years ago, following which her flow was excessive. Seven years ago a hard tumor was removed through the vagina; recovery was slow. Her menstruation then became irregular for about four years, when excessive irregular flowing returned. Aching in back and lower abdomen became more and more troublesome. During the last 3 years there has been a constant profuse discharge from the vagina. Four weeks ago she suffered severe strain from lifting. Profuse flowing at once began, with frequent desire to urinate. The vagina was found to be filled with a large oval mass, with apparently no pedicle. A diagnosis of inversion of the uterus was made, because a depression could be felt where the uterine body should be. Blood examination: Hemoglobin, 50 per cent. The red cells show deformity and variation in size. Leucocytes not increased in number, but the polymorphonuclear cells are relatively increased. The laboratory diagnosis was given as a secondary anaemia, with a polymorphonuclear leucocytosis. (The absence of leucocytosis in the presence of infection, with only a relative increase of polymorphonuclears points to a lowering of the patient's resistance.) Operation, Nov. 11th, the tumor mass was removed per vaginam, together with the uterus and its appendages. The specimen shows the in-drawing of the ovaries and tubes, a useful point in

diagnosis. (Photograph I.) Her temperature preceding operation was 103, pulse 110. Within a week her pulse and temperature became normal and remained so. Left the hospital Dec. 7th and on June 2nd she is reported to be well.

I have shown this specimen because complete inversion of the uterus caused by extrusion of a submucous fibroid is not common. More

CASE VIII. INVERSION OF UTERUS FROM FIBROID OF FUNDUS.

T—Tumor
J—Junction of tumor and body of uterus
M—Muscularis
C—Cervix
O—Ovary
F. T.—Fallopian tube
C. C.—Cervical canal

rarely, however, does it occur following delivery at term. In the Rotunda Hospital, Dublin, only one case of complete inversion was observed in 190,800 deliveries, and at the Vienna Lying-in Hospital only one in 250,000.

Cases like the one here shown must be rare, but it is interesting to observe that in case X. of this clinical series we have the beginnings of a condition perhaps identical.

Case IX. **Chronic metritis, subinvolution and double pyosalpinx, after streptococcic puerperal infection. Abdominal hysterectomy.** (Dec. 8th, 9 to 10 A. M.)

Mrs. M., aet 34. Father died at 45 of bronchitis. Mother died at 42 of tuberculosis. One brother died of typhoid. Has one brother and one sister in good health. Menses began at 12; duration 5 days; severe pain during first day. Has one child 16 months old. Miscarriage Oct. 10, 1904, followed by sepsis. Entered Harper Hospital four days later with a temperature of 105.2 and pulse of 120. I then disinfected uterine cavity and drained through Douglas' cul-de-sac an abscess in right broad ligament. The cul-de-sac was found to be filled with a brownish fluid, the growth from which, after inoculation of sterile media, showed pure cultures of streptococci. The patient made a fairly satisfactory recovery, except that local symptoms remained and headaches were troublesome.

Here was a case where the vital forces were not building a limiting wall either in the endometrium or in the pelvis outside the uterus. The incision through the vaginal vault, which was carried freely from one uterine artery to the other, opened the lymphatic channels about the infected uterus and favored the direct disposal of the toxins being generated. At the same time the contact of the gauze left in the pelvis may be supposed to attract leucocytes to the locality and to favor thus the formation of a protecting wall.

Having been advised to return for examination, the patient presents herself in a condition of imperfect recovery. Exploratory abdominal section is made (Dec. 8th), and the uterus is found one-half larger than normal, with a consistency such that the tenaculum-forceps cut through the tissue and are useless in the operation. Both ovaries are found enlarged and cystic. These conditions, considered in the light of the patient's social necessities, as stated below, made abdominal hysterectomy the only reasonable course. Accordingly this was done; the highest subsequent temperature, except for a few hours on the 9th day, was 100. The pulse remained normal throughout. The gauze drainage was removed from the vagina on Dec. 10th and a lysol douche was given twice a day after the 11th. She left the hospital on the 14th day after operation. Pathological report: Both Fallopian tubes were filled with pus, which was in part made up of the debris of their epithelial lining. Their plicae were densely nfiltrated and adherent, while the low-staining character of their epithelial covering marked the beginning of necrosis. Muscular walls of the tubes were, in section, studded with patches of leucocytes. The uterus was the seat of marked increase in blood-supply. Lymph-spaces were distended. Mucosa of corpus uteri showed some increase of interstitial cells, but this was much less pronounced than the glandular hyperplasia. The ovaries contained many follicular cysts and areas of hyaline degeneration as well as relative increase of connective tissue.

The pockets formed by the increase of uterine glands serve as incubators for bacteria and the inflammation induced naturally becomes chronic. This uterus in its condition of subinvolution, complicated by the local hypertrophy and infection, together with the tubal conditions, has caused the patient continual suffering. Later the fibrous tissue resulting from the continued irritation might be expected to contract and leave a small hard organ, with another train of reflex symptoms. The

uterus, as we find it, is extremely friable and I believe it can never be made normal. The patient is a poor woman who cannot experiment with two or three years of local treatment with so little hope of ultimate success. I deem hysterectomy the only method of treatment that will promise relief in her case with any degree of certainty.

This patient gave no history of gonorrheal infection and examination of smears from the discharge for the detection of the gonococcus gave negative results. Agar and bouillon cultures from the original discharge yielded no growth except that of a streptococcus. The microscopic appearances found in the tubes (See Plate II.), in the light of the above facts, are interesting in relation to the sterility of women sometimes observed after severe puerperal infection.

On June 2nd, the patient reported herself in good health.

Case X. **Fibro-polyp, attached to fundus uteri and threatening inversion of the organ. Removal by section of cervix.** (Dec. 8th, 10 to 10:30 A. M.)

Miss W., aet. 19. Family history negative. Menses began at 13. Normal until last March, when she flowed excessively for one week. The increased flow was repeated in May. During her June period, hemorrhage was severe. On Nov. 25th it began still more severely; so that she fainted in the bath-room and since that has remained in bed. A fibropolyp, 5cm in diameter was found attached to the center of the fundus uteri. This growth, apparently by uterine contractions, had been forced downward through the cervix. I now split the uterine cervix posteriorly, the incision extending into the corpus uteri. The tumor was removed from its uterine attachment by a wedge-shaped cut and the incision closed by catgut. The incision in the cervix was then similarly closed and the uterine cavity drained by a strip of iodoform gauze. Her recovery was uneventful and she left the hospital on Dec. 19th. She regained her health rapidly and has remained well. Her menses are now regular and normal.

In young virgins, in the absence of systemic causes, excessive menstrual flow usually signifies submucous fibroid or fibro-polyp.

The condition here found, depending upon the high attachment of the pedicle of the tumor, may be thought of as a stage in the development of the condition seen in Case VIII.

Case XI. **Amoebic dysentery. Irrigation of colon through opening in caecum.** (Operation, Nov. 1st, 1904; demonstration in clinic, Dec. 8th.)

Miss F., aet. 37. Family history negative. Menses began at 15; duration 3 to 4 days. Dysmenorrhoea. During last four years flow has become scanty, lasting only one day. Patient has not been well for four years. In December, 1903, she went to England, thinking the change might improve her health. While there in April, 1904, she had an attack of intestinal indigestion and a rash, apparently shingles, appeared upon her left side. Diarrhoea began at the same time and was more troublesome at night. By June the diarrhoea was constant, about six stools daily. In July, August, and September, she lost twenty-one pounds in weight. She then returned to America. She entered King's Hospital, Sept. 15th. Rest in bed and the various medical measures employed were of no avail. Examination of the stools meantime had shown the presence of the amoeba coli. Inquiry elicited the fact that in England she had eaten frequently of raw vegetables, especially of the lettuce which is imported there from the South of France. The rectum was so irritated that colon-irrigation through it was unsatisfactory, or rather, impossible. On November 1st, I made incision over McBurney's point, removed the appendix vermiformis, and fastened a rubber catheter into the opening left in the caecum, attaching the caecum to the parietal peritoneum. Through this catheter three days later colon-irrigations were commenced, the fluids used escaping by way of the anus. Blood examination, Sept. 25th, by Dr. Sill, of the Detroit Clinical Laboratory, gave: Red corpuscles, 5,746,000.; haemoglobin, 75 per cent.; color-index, 0.65. Leucocytes, 2.500., of which 61.75 per cent. were polymorpho-nuclear cells, 27.5 per cent. mononuclear, and 8.75 per cent. eosinophiles. "There is a consider-

able anaemia, secondary in type, which appears to be masked by some concentration of the blood." Examination of the blood, six weeks later, showed haemoglobin 90 per cent. and a reduction of eosinophiles to normal. Repeated examinations of the urine always gave results within the normal. The temperature ranged from 99. to 101. until Nov. 7th, after which it remained normal. Hot saline irrigations twice daily gave her great comfort and her general health began to improve.

The case has been brought in for the purpose of illustrating the necessity of examining the fæces in cases of persistent dysentery as well as to demonstrate the effectiveness of this method of irrigation of the entire large bowel. It is of interest to note that, for purposes of examination, the portions of fluid obtained toward the end of the irrigation are found most satisfactory. The quantity of fluid necessary to fill the bowel, before any would appear at the anal opening, was almost constantly one quart, when the bowel would begin to empty itself by suc-

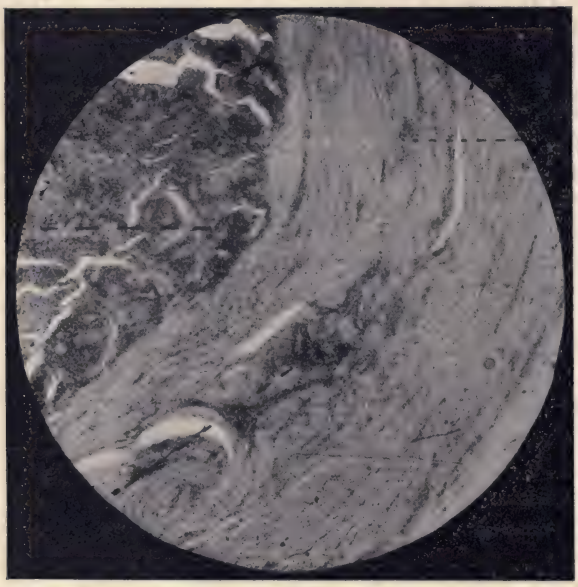

Plate II.

Portion of cross-section of Fallopian tube in Case IX. (*a*) Smaller areas of infiltration separating the muscular structures. (*b*) Larger infiltration area. (*c*) Lumen of tube, containing plicae matted together in a purulent exudate.

cessive spasmodic jets. The process was so far from uncomfortable to the patient that she was said to have gone to sleep at times during the course of the operation. In December the use of a solution of quinine, gr. viii to the pint, was commenced, and this was later found to be made more effective by the addition of min. xii of hydrochloric acid. From Jan. 8th to 15th there was no bowel movement except during irrigations. From this time on the improvement was more marked. When she left the hospital, May 5th, there were still a few amoebæ in the stools, but no other evidence of the disease remained. In a letter received from her June 1st, she said that her improvement in health was continuing and that she was quite satisfied with her progress. (*To be Continued.*)

DETROIT MEDICAL JOURNAL

A MONTHLY EPITOME OF PRACTICE AND THERAPEUTICS

HERBERT M. RICH, M. D., Managing Editor

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The Detroit Contagious Disease Hospital.

In another column we print entire the reply of the City Board of Health to a petition presented to the Common Council by citizens of Detroit residing near the site purchased by the Board for the City Contagious Hospital. This petition asked the Council to prevent the building for the proposed hospital on the ground immediately joining Grace Hospital in the rear. It presented various objections which are answered seriatim by the reply. The subject has been widely discussed in the public prints of the city, and the ignorant, not to say malicious, published comments on the matter have been enough to deceive the very elect. These same papers after printing columns of silly remarks on the subject by persons entirely ignorant, have declined to print the authoritative and able statement of the city's own Board. We publish it that every physician in the state may be able to discuss the question intelligently and to know exactly the position taken by the Board and their reasons for so doing. This reply is conclusive. It answers every objection of the petitioners. There is no good reason why the hospital should not be built on the site proposed; there are many reasons in favor of that site. One might be added to the reasons given by the Board.

The question which the Board had already decided long before any objection was made, was whether this hospital could be built in the city limits or whether is should be strictly isolated like the present small-pox Hospital. Having decided that there was no reason for building it outside, they very wisely concluded that it should be as agreeable, convenient, and accessible a location as possible. One reason why this is important pertains to the real ultimate object of the hospital, and that is the extinction of the contagious diseases. The hospital is not merely for the temporary treatment of those who happen to have disease, but wisely used by the public health authorities, may have great influence in freeing the city entirely from contagious disease, so that, as Dr. W. W. Kean said two years ago,—"case histories shall read, 'the usual health of childhood,' instead of, 'the usual diseases of childhood.'"

To be of greatest service in accomplishing this the largest possible number of cases of these diseases must be sent to this hospital. If it is

inaccessible, shunned as a pest-house, only those will go who are compelled to do so, but with a first-class hospital, convenient, pleasant, and accessible, where a child may be treated by its own family physician, many parents will send a child there in order to protect the other children of their household.

The city is to be congratulated on having a Health Board, which knows its business.

The State Journal Movement.

The first number of The Journal of the South Carolina Medical Association lies before us, and announcement is made that the Ohio State Medical Society will this year substitute a state journal for its annual volume of proceedings. The future of these, together with the numerous other recently established representatives of state societies, will be watched with interest. Their permanency and value promises to vary directly as to the ability of the editor and his continuance in office. A great danger lies in trusting to the vox populi to choose a man of technical attainments and the successful medical editor may be said to have such attainments, for it often occurs that a "good fellow" and a keen practitioner is anything but a success with a pen in his hand, and just this sort of man is likely to be chosen. Granted, however, that the editor chosen be well qualified, how long will his tenure of office last ? What stimulus is there in developing a journal along some line with a view to the future when one is aware that next year he may have no connection with the publication?

Let it be understood, however, or even be made a by-law, that the editor shall serve for not less than five years and a continuity of policy and consistent standard of publication may be confidently expected.

Tuberculosis and Travel.

Dr. John William Trask, of the Public Health and Marine Hospital Service, contributes to the May issue of the Journal of Military Surgeons a consideration of the dangers of the unrestricted travelling of consumptives. The topic is timely, if not entirely new. We isolate patients with diphtheria, smallpox, and scarlet fever and forbid the transfer on public conveyances of the bodies of people dying with these diseases. But a person afflicted with tuberculosis, a disease killing many times the number of all these maladies combined, may travel ad libitum from where he pleases to whither he will and back again and may spit all the way.

Dr. Trask recommends that each car be disinfected at the end of each trip; that common drinking cups be abolished; that dishes used in the dining cars be immersed in boiling water in addition to their mechanical cleaning, and that blankets used in sleeping cars be sterilized. He believes that the railroads should furnish sputum cups and provide passengers with them when necessary, and that they should have special compartments for consumptives on the through trains to the tuberculosis resorts in the southwest.

EDITORIAL NOTES

Medical Acts of the 1905 Legislature.

Briefly the laws passed by the recently adjourned session of the Michigan Legislature may be stated as follows:

(1). Enabling cases tried for non-registration with the medical board to be brought before the Circuit Courts.

(2). Changing the statute of limitations so that a suit for malpractice against a physician cannot be brought where more than two years have elapsed since the alleged malpractice.

(3). Appropriating $30,000 for the establishment of a state hospital for incipient tuberculosis and creating a board of directors for same.

(4). Requiring physicians and midwives to register all births within ten days.

(5). Appropriating maintenance fund for the Psycopathic Ward of the University Hospital in Ann Arbor.

(6). Making the Secretary of the State Board of Health a direct appointment of the Governor.

(7). Forbidding the marriage of idiots or insane persons, or persons suffering from gonorrhea or syphilis not yet cured.

The failures to convict under the present medical practice act, have been mostly due to the misunderstanding of the law by juries in the court of a justice of the peace, confusion being worse confounded by the tactics of pettifogging lawyers. With suit brought before a circuit court, it is thought that the present law will be efficient.

Dr. Tibbals, of Detroit, has been a strong advocate of the change in the limitation of time in which suit could be brought for malpractice. It is thought that the new statute will render it more difficult for blackmailers to obtain unjust decisions against physicans.

Although $30,000 is too small an amount to allow a suitable hospital to be built for the treatment of those ill with incipient tuberculosis, a beginning can be made, however, with this amount and the friendliness of the members of the Legislature to the project gives assurance that the institution will be cordially supported and will become an important factor in the health of the state. The governing board has not yet been appointed by the Governor.

The law requiring the registration of births was earnestly advocated in the **Journal** for January, 1905. If this law proves as efficient as its promoters hope, it will give Michigan the best law of the sort in this country. As before pointed out, this is an extremely important item in a system of vital statistics and it is to be hoped that the physicians of the state will give it their cordial endorsement and co-operation.

Dr. W. J. Herdman, of Ann Arbor, is to be congratulated on having his long cherished plan for a psycopathic ward in connection with the University Hospital realized at last. It is an ideal plan for the care of those unfortunates who become mentally unsound, and promises to become one of the best known institutions in the state.

In the modification of the marriage law is a clause compelling physicians to testify in court as to the presence of uncured gonorrhea or syphilis in any patient who may contract a marriage while uncured. In the discussion concerning the prevention of venereal diseases at the recent meeting of the State Medical Society, it was quite evident that the majority of the physicians did not know of th existence of such a law. It is a step in the right direction.

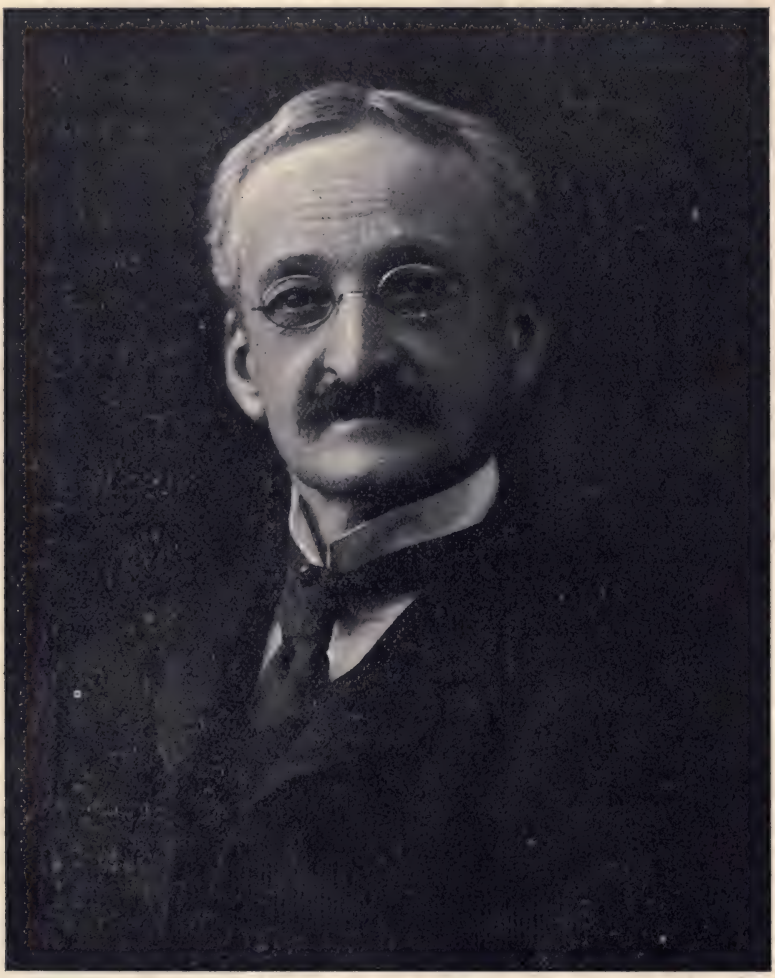
MICHIGAN STATE MEDICAL SOCIETY.

The 40th annual meeting was held at Petoskey, June 28-30, under most favorable auspices. The beautiful scenery of Little Traverse Bay and the excellent hotel accommodations of Petoskey were re-enforced by ideal weather conditions. The papers evoked discussions often spirited, but never bitter, and the spirit of friendliness and cordial relations shown was notable.

The President's Address.

The address of the Retiring President, Dr. B. D. Harison, was a contribution of permanent worth to the history of the medical profession of Michigan and

should be read with pride by every progressive member of the profession in the state. Its salient features were, in brief, as follows:—Up to 1883, there was "medical free-trade" in Michigan, any person being allowed to assume the title of physician and to practice medicine without regard to qualifications. From 1883



DAVID INGLIS, M. D.
DETROIT
President Michigan State Medical Society, 1905-6.

to 1899 there was "legalized free-trade"—a medical registration law which was entirely inefficient. From 1899 to 1903, the Chandler Act enabled the State Board of Medical Examiners to put out of business 1,600 quacks. The new law of 1903 as carried out by the State Board provides the highest standard of requirements for admission to medical practice in this country and the Michigan law has already been approved by two national medical bodies as the best in use and has also been copied in other states. The law against obscene medical advertisements has not yet been enforced owing to legal delays, but has recently been held constitutional and steps for its enforcement will be taken immediately. Reference was made to the proceedings of the last legislature in medical matters, and attention was called to the influence of the profession in important

questions when well organized and united. Recommendations were made as follows: (1) That the Society make Detroit its permanent meeting place. (2) That there should be co-operation with the State Historical Society in recording facts regarding the pioneer physicians of the state. (3) That the Society appoint a committee to undertake active measures in combating the patent-medicine evil.

Dr. Stockwell, of Port Huron, reported that at his initiative the Michigan Congregational Society has passed a resolution censuring the publication in religious papers of advertisements of alcoholic remedies and secret and fraudulent nostrums

The committee on resolutions reported today the request of the Society that Dr. Wm. Beaumont, who as army surgeon a century ago, made the celebrated observations in the stomach of the wounded Alexis St. Martin, be nominated for a placein the Hall of Fame at New York.

The resolutions also demanded legislation to prevent quack advertising, the cutting of rates, and the buying of cases.

Officers for the following year were elected as follows:

President—Dr. David Inglis, of Detroit.

Vice-presidents—Arthur M. Hume, Owosso; A. W. Harmbogen, Marquette; Florence Huson, Detroit; W. M. McNeil, Hancock.

Councillors—M. Wilson, Port Huron; C. H. Baker, Bay City; A. H. Rockwell, Kalamazoo; R. H. Spencer, Grand Rapids.

Section Officers:

Medicine
Chairman—H. Ostrander, Kalamazoo.
Secretary—R. S. Rowland, Detroit.
Orator—B. H. McMullin, Cadillac.

Surgery
Chairman—E. C. Taylor, Jackson.
Secretary—F. J. Lee, Grand Rapids.
Orator—A. W. Crane, Kalamazoo.

Obstetrics and Gynecology
Chairman—Florence Huson, Detroit.
Secretary—B. R. Schenck, Detroit.
Orator—E. G. Abrams, Dollar Bay.

Dr. Bovee, of Washington, was not able to attend, but there was an unusual number of excellent papers read. Among those provoking the most discussion was that of Dr. T. A. McGraw on Statistics of Cancer; Dr. Carrier on Venereal Prophylaxis; Dr. C. D. Aaron on Moveable Kidney; and Dr. Donald's demonstration of a new method of withdrawing pleural effusions.

The orations were delivered before large audiences and were well received. The stereopticon demonstrations by Drs. Warthin, Cowie, and Hickey were extremely interesting and important contributions to the general program.

THE DETROIT CONTAGIOUS DISEASE HOSPITAL.

(Reply from the Board of Health).

To the Honorable, the Common Council:

Gentlemen—The following is an answer to the petition of those persons who object to the erection of the proposed Contagious Disease Hospital upon the site selected by the Board of Health, bounded by Willis and Alexandrine avenues and Brush street, and which petition was presented to your honorable body on June 3, to discuss this matter, and also a statement of the reasons why, in the opinion of the Board of Health, it is, from a scientific and medical point of view, an entirely proper, safe, accessible and suitable location for this hospital.

Following this are copies of legal opinions received from the office of the Corporation Counsel upon the same subject, and which are hereby made a part of this answer.

As to the necessity of a hospital for contagious diseases in this city. The law under which the Board of Health is constituted makes it the duty of that board "to procure suitable places for the reception of persons afflicted with malignant, contagious and infectious diseases, and in all cases where sick persons cannot be otherwise provided for, to procure for them medical and other attendance and

necessaries." The city maintains an isolation hospital for the care of smallpox on Hamilton Boulevard, which will meet all demands for many years to come. It is not intended by the Board of Health to use the proposed Brush street hospital for the isolation and treatment of smallpox. This will be guaranteed to the future by the terms of the deed transferring the property to the city.

The proposed hospital is for the reception of patients suffering from scarlet fever, diphtheria, measles, chicken-pox, German measles, erysipelas, tonsilitis and such diseases as are communicated only by close association or actual contact with an infected person or object. Harper Hospital maintains a small isolation pavilion for the care of diphtheria and scarlet fever; with this exception, patients suffering from these diseases are not received in the general hospitals of the city.

Acting on these facts, the Board of Health has for three years asked for an appropriation for the purpose of establishing a proper hospital, and each year the matter has been fully discussed before the Common Council and the Board of Estimates, and the reasons presented why such a hospital is a necessity.. It has been shown, for example, that of the cases of diphtheria treated outside of Harper Hospital the last fiscal year the motality rate was 10 per cent greater than of those treated at the hospital, while the cases of scarlet fever the difference in the mortality rate was 2 per cent. in favor of hospital treatment.

Inasmuch as there were 1,252 cases of diphtheria treated at home, it is fair to conclude that if it had been possible to treat all of these cases at a hospital, with no better facilities than there are at Harper's, the result would have been a saving of 125 human lives. Applying the same reasoning to scarlet fever gives us a saving of 2 per cent. of 508 cases, or 10 human lives, from this disease.

Last year there were reported in Detroit 1,433 cases of diphtheria, but only 181 were sent to Harper, and of the 575 cases of scarlet fever reported, only 67 went to the hospital. The principal reason why so small a number was cared for at Harper was lack of room, and it is a fact that, even with so small a proportion of our cases going to the only hospital in the city available for that purpose, that hospital was on several occasions during the year so overcrowded that it was forced to refuse patients, and during these periods of time there was no place whatever in the City of Detroit to which cases of scarlet fever and diphtheria could be taken for treatment. This congested condition was almost continuous from March 26 (on which date the Board of Health made application for admission of two cases of scarlet fever, which were refused) until about the middle of April. On the sixth day of that month Harper was filled with 19 cases of scarlet fever. In a small ward that should not receive more than three patients there were eight cases of scarlet fever, and they were so crowded that it was necessary to keep the eight children in five beds. These are a few of the arguments that have been advanced year after year by the Board of Health in favor of a contagious disease hospital. Following is the experience of some other cities:

In 1896 the City of Boston constructed, at the expense of $650,000, the South Department of the Boston City Hospital for the care of contagious diseases. This hospital has received the hearty support of the medical profession and the people of Boston, and is one of the most popular institutions of the city. The influence of this institution in the restriction of the spread of dphtheria and scarlet fever and the reduction of the mortality in these diseases has been so marked that the larger cities in the east are rapidly following the example of Boston. New York, Philadelphia, Montreal and Worcester have erected contagious disease hospitals during the past year. In New York city the sum of $7,000,000 has been granted to the Board of Health for the erection of a comprehensive system of hospitals in various parts of the city for the care of contagious diseases.

In Detroit, in 1894, there were reported to the board 2,008 cases of diphtheria and scarlet fever alone. The experience of Boston shows that over 60 per cent. of the reported cases of these diseases are cared for at the South Department. With a modern, well equipped and well administered hospital in Detroit the experience of Boston would probably be repeated. At the present time each quarantined house is a center of infection but feebly controlled by the Board of Health, and may remain so for months. The segregation in one well conducted hospital of 50 per cent. or more of the cases would be a most important factor in limiting the spread of these communicable and dangerous diseases. Without a hospital the efforts of the board must remain inefficient; with the hospital, all dangerous centers of infection can be abolished.

As the experience of other cities has proven, the hospital will be a safe and

welcome retreat for rich and poor alike, and the income derived from patients able to pay for their attendance will go far toward the support of those who must, in the interest of the safety of the community, be cared for at the city's expense.

As your committee has received some expressions of opinion as to the communicability of these diseases and their method of transmission, the board submits for your information the subject quotations from a few of the most prominent medical authorities of the United States and Europe. The quotations are all taken from the chapters on scarlet fever.

ANALYTICAL CYCLOPEDIA OF MEDICINE—Sajous; F. A. Davis Co., Philadelphia, 1905. Vol. V., p. 534. "The chief source of infection is the patient himself, but the area of contagion is limited to a few feet."

MEDICAL PRACTICE—Bain; Longmans, Green & Co., London, 1904, p. 834. "In the open the carrying distance must be very limited; at any rate, there is no special prevalence of the disease in the immediate neighborhood of isolation hospitals."

DISEASES OF CHILDREN—Meigs & Pepper; Blakiston, Philadelphia, 1882, p. 773. "The distance to which it may be carried by the air does not appear to exceed a few feet."

A SYSTEM OF MEDICINE—T. C. Allbutt; the McMillan Co., London, 1899, vol. 11, p. 129. "That scarlet fever is not spread to any distance by aerial convection is well shown by the negative experience derived without exception from certain large fever hospitals, whose walls are closely surrounded with small tenements for the most part crowded with young children.

DISEASES OF CHILDREN—J. Lewis Smith; Lea Bros., Philadelphia, 1896, p. 254. "The area of contagiousness of scarlet fever is small; it apparently embraces only a few feet."

THE ENCYCLOPEDIA MEDICA—Chalmers Watson; Longmans, Green & Co., London, 1902, Vol. X., p. 490. "The distance of conveyance by aerial convection is not great. This is emphasized from the fact that residents in the immediate vicinity of a fever hospital do not suffer in consequence."

TWENTIETH CENTURY PRACTICE OF MEDICINE—Stedman; Wm. Wood & Co., New York, 1898, Vol. XIV., p. 15. "In order that scarlatina can be transmitted immediately, the contact must be quite close, such as touching, kissing, inhaling the breath, etc."

ACUTE CONTAGIOUS DISEASES—Welsh & Schamberg; Lea Bros. & Co., Philadelphia, 1905, p. 357. "There is no evidence to indicate that scarlet fever contagion is disseminated by aerial transmission. The immediate vicinity of scarlet fever hospitals appears to be as free of the disease as other sections of the city. In this respect scarlet fever differs from smallpox, in which disease the territory immediately surrounding the hospital is apt to show a disproportionately large number of smallpox cases.

"The following figures are taken from the Medical and Surgical report of the Boston City Hospital, 1897.

Radius of 1-8 mile from scarlet fever hospital	00 cases
Radius of 1-4 mile from scarlet fever hospital	68 cases
Radius of 1-2 mile from scarlet fever hospital	71 cases
Radius of 3-4 mile from scarlet fever hospital	75 cases
Radius of one mile from scarlet fever hospital	72 cases
Within one mile of the hospital	286 cases
Beyond mile limit	756 cases

"It is seen from the above figures that no cases developed within the 1-8 mile limit about the hospital.

Our experience at the Municipal Hospital at Philadelphia led us to believe that the striking distance of scarlet fever is extremely limited. It has been exceedingly rare for families in the immediate vicinity of the hospital to become attacked with scarlet fever, although they have not escaped smallpox."

A practical study of this question by the board confirms the opinions expressed by the medical writers. Health authorities make no effort to isolate scarlet fever or diphtheria hospitals in unsettled parts of cities.

The South Department (contagious) of the Boston City Hospital, 300 beds, adjoins the grounds of the general hospital and is in one of the most thickly settled parts of the city.

The new Scarlet Fever Pavilion in New York, 400 beds, is built directly on the street on a small lot close to the Willard Parker Diphtheria Hospital and the Biological Laboratory and the Administration Building of the Health Depart-

ment. This is one of the most thickly populated sections in New York. At a recent visit, two members of the Detroit Board of Health counted upwards of 300 children playing in one block near the hospital.

In both New York and Boston the conditions of the immediate neighborhood of these hospitals is most favorable to the spread of infection; still there is no evidence of the communication of the disease from them.

The experience in Detroit is the same. Harper Hospital, as is well known, maintains a small pavilion for the treatment of scarlet fever and diphtheria. This building is situated in the rear of the main building; about 90 feet from the south wing and about 60 feet from the abutting Brush street property. In warm weather, during convalescence, the children play freely in the grounds around the pavilion. This pavilion has been maintained for a number of years, and the report of January 1, 1905, shows that there were treated in the hospital 274 cases of contagious disease during the year. No complaint has come to the Board of Health from the residents of Alexandrine avenue, John R. street, Martin Place, Woodward Avenue Terrace, Brush or Brady streets of the presence of this hospital and there is no evidence that disease has been communicated beyond the grounds.

Although the two departments of the pavilion are separated from each other only by a brick wall and the windows open within a few feet of each other there have been no cases of communication by aerial convection of either scarlet fever or diphtheria to the adjoining departments.

From the foregoing evidence the Board of Health can assure your committee that a hospital such as is proposed is no more a menace to the health of the vicinity than the three hospitals at present existing there.

To properly fulfill its object for the control of disease, such a hospital must be, above all, easily accessible to all parts of the city.

A hospital placed in a remote and unsettled part of the city would be feared and shunned; the apparent necessity for such remote isolation would condemn it and seriously impair its usefulness.

Transportation of patients would be difficult, and dangerous to delicate infants and children, who are the most frequent sufferers from the contagious diseases. The necessity of a long journey in the winter months, when diphtheria and scarlet fever are most prevalent, would often be an insurmountable difficulty in gaining the consent of parents to hospital isolation and treatment for their infected children.

To physicians and nurses easy accessibility is equally essential. The liberal policy pursued by Harper and Grace Hospitals toward the physicians of the city will be followed by the Board of Health. Any physician may bring his patients to the hospital for isolation and keep them under his care, subject only to the rules necessary to safeguard the community against personal convection of the disease. With the hospital centrally located and close to the hospital center of the city, physicians will more frequently recommend hospital treatment.

To the patients' relatives and friends, again, accessibility is essential. Mothers and fathers must visit their sick children and every facility should be given them, thus to soften the anxiety that separation entails, provided, of course, that all restrictions are observed to prevent the spread of contagion. It has been shown that a centrally located hospital is not a source of danger to its vicinity and it would be a cruelty on the part of the community to demand that the unfortunate subjects of contagious disease should be pushed unnecessarily into a remote and inaccessible part of the city.

Almost every act of the board which has for its object the safeguarding of the public health imposes upon the individual some monetary loss, inconvenience, or even hardship. While the board regrets that in the selection of a site for a hospital it has opposed the wishes of the property-holders of the neighborhood, it must be mindful of the interests of the community at large and of the comfort, health and lives of those from whom it demands the sacrifice of isolation in the interests of the public health.

In regard to the disturbance of property values in the neighborhood of the site, which seems to be the controlling factor in the opposition to the action of the board. That the unfortunate agitation of the subject during the last few weeks has disturbed property values is quite possible, but the past sustained values of the property in the immediate vicinity of the Harper Hospital contagious pavilion would show that when the present agitation subsides values will readjust themselves to their former point. That the proximity of the Harper Hospital contagious department has had little influence upon the value of sur-

rounding property is shown by the fact that the Board of Health for 30 days in May held an option upon the property on Brush street in the rear of the hospital within 75 feet of the contagious pavilion, from the agent of the Brush estate. The value of the property was held at $50 per front foot, or 39 cents per square foot. The board purchased the apparently more desirable location on Alexandrine avenue, ditsant at least 200 yards from Harper Hospital, and measuring approximately 322x260 feet, for 26 cents per square foot. The agent of the Brush estate gave the option with a full knowledge of the purpose for which it was to be purchased. He at that time, apparently, had no fear, from his past experience, of the effect of a contagious disease hospital upon his contiguous property.

The suggestion that some other site in a less desirable part of the city be selected cannot be entertained by the board. If the hospital is dangerous to the residents in the vicinity of the Brush street site it would be equally dangerous to the vicinity of a Beaubien street site, or a Clinton street site.

If the hospital were a menace to the health of the residents of any locality the board, whose duty it is to conserve, not to endanger, the public health, would not recommend its erection on any site not properly and safely isolated from the rest of the city.

The Brush street site was selected because of its peculiar adaptability to the purposes of the hospital, and your committee has presented no arguments that impel the board to alter its decision.

June 10th, 1905.

Board of Health of City of Detroit:

Gentlemen--Your inquiry, made by Dr. Kennedy, with reference to the sole power of your board as to the selection of a site for the contagious disease hospital has been referred to me.

I beg leave to state that in my opinion the sole discretion in the premises is vested in your board, and neither the Common Council or any other authority has the right to interfere with that discretion.

On March 22nd, 1904, Mr. Tarsney gave an opinion to the Hon. William C. Maybury, then mayor of the city, as to the power of the board in the premises, which opinion I understand is before your board, but the question of the sole discretion of your board in the premises was not then considered.

Yours very truly,

JOHN W. McGRATH,, Chief Asst. Cor. Counsel.

All of which is respectfully submitted, with a request that this answer be printed in full in the minutes of your honorable body.

J. B. KENNEDY,
C. G. JENNINGS,
JOHN N. BAGLEY,
SAMUEL T. DOUGLAS,
Board of Health.

PROGRESS OF MEDICAL SCIENCE

Actinomycosis. ....

A. D. Bevan (Annals of Surgery, May, '05).

The micro-organism of actinomycosis (the ray fungus), gains enarance to the human tissues through the mucous membranes, or through skin, although in the latter it is probably necessary to have a break in continuity. Fifty per cent. of cases present lesions in head and neck, after infection through oral cavity; 20 per cent. occur in the chest, by penetration of the respiratory mucosa; 25 per cent. occur in abdominal viscera, following invasion of the intestinal mucosa; 2 per cent. in the skin; in the remainder it is impossible to locate the point of entry, and it therefore seems probable that the organism may produce lesions at a distance, leaving no trace at its site of inoculation. Growth is characterized by direct extension, seldom by lymphatic conduction, and rarely by pyemia. The diagnosis is suggested by granulomatous swelling and is confirmed by the finding of sulphur-

grain bodies in the pus, which show the ray fungus under the microscope; suppuration is almost inevitably accompanied by a mixed infection, and the discharge has a peculiar odor. The disease is commoner than generally known, but is seldom recognized because of prevalent lack of familiarity.

Actinomycosis of the neck and skin are the forms most amenable to treatment, which is mainly surgical. Where surgery can not reach the lesion, prognosis is more grave; potassium iodide and the X-ray sometimes effect an improvement, and spontaneous recovery has been reported in a few instances. The writer reports 6 cases coming under his own observation.—C. S. Oakman.

Pyelitis.

H. A. Kelly (Dominion Med. Monthly), reviews the general subject of pyelitis and illustrates the principle types of the affection by means of short histories of personal cases. He emphasizes the fact that mild types of pyelitis are not infrequent, and that if they are unrecognized or improperly treated, they may lead to very serious consequences. The practical deductions to be drawn from the paper are: (1) It is important to take cognizance of a pyelitis of any grade whatever, as it may, at any time, become a menace to the functional value of the kidney, or even to life itself. (2) The severer grades of the affection are often the sequelae of a milder pyelitis of long standing. (3) The first step in the investigation is to determine the extent of the affection by estimating the amount of pus in the urine and the relative number of organisms. (4) It is important to determine the cause of the affection, which is often of a mechanical nature, and therefore easily relieved. (5) By removing the cause, the disease may either be cured, or be so far benefitted that a subsequent complete relief by means of local treatments is easily brought about. (6) The milder forms are best treated by rest, abundant water and urutropin. (7) If there is not a speedy improvement, the next simplest plan of treatment is the catheterization of the kidney every two to four days for the purpose of evacuation, distension of the pelvis, irrigation, and instillation. Boric acid and nitrate of silver are the best drugs in this connection. (8) Improvement should be measured by the disappearance of pus from the urine and the diminution in the organisms, taking, say, three platinum loops as the measure in conveying the infected urine to the agar. (9) A patient improved, but not cured (complete absence of bacteria) should be watched in the intervals of treatment, and guarded with especial care in case of any intercurrent disease. Should such a disease supervene, urutropin is a good prophylactic. (10) The severer forms of the disease may be treated by irrigation, which often brings great temporary relief. As a rule, however, the kidney must be opened and drained; if it has been extensively diseased, it should be removed.

Surgical Treatment for Renal Tuberculosis.

(Dominion Medical Monthly, March, 1905, Howard A. Kelly, Baltimore). Since 1893, when he did his first ureterectomy, Dr. Kelly has had 44 cases of renal tuberculosis, upon which he bases his conclusions The disease seldom ascends from the bladder, at least in women, but is conveyed to the kidney through the arterial system. Although recovery by treatment other than surgical is possible, yet the rule obtains that the process is progressive and ultimately fatal. Death may be postponed as long as twenty years, but is preceded by years of invalidism. The logical treatment, therefore, is extirpation at the earliest possible date. If the disease is in the incipient stage, the operation should be delayed only long enough to get the patient in fair condition—a week or two; if it be advanced, such delay is not allowed.

Preliminary investigation includes: 1. Search for tubercle bacilli in the urine, for which smegma bacilli must not be mistaken. 2. Palpation of the lower ends of the ureters by vagina or rectum. 3. Cystoscopy. 4. Catheterization of ureters. 5. Determination of the existence of one sound kidney. 6. Guinea pig inoculation in doubtful cases. In addition to this routine, cryoscopy and estimation of solids are helpful in diagnosis Careful search for foci of tuberculosis in other parts of the body should be made.

Of the three operative procedures, nephrotomy is indicated only in patients too ill for excision, or presenting phthisis of the lung or other kidney. Excision of the diseased area is so rarely successful that it is not rational. Nephrectomy is the operation of choice, and should include more or less complete ureterectomy

according to the condition found. The writer describes the technique of the operation he practices.

Tuberculous Peritonitis.

W. J. Mayo, (Jour. Am. Med, Assn., Apr. 15). "Surgical tuberculosis in the Abdominal Cavity with Special Reference to Tuberculous Peritonitis."

The paper is based on 184 cases of intro-abdominal tuberculosis observed by the writer; in this number, localized tuberculosis of the intestine occurred 21 time, either as multiple or single ulcers, or in the conglomerate form producing a tumor mass, as typically seen in the caecum. Stricture is a frequent result of these lesions, and excision and anastomosis is the proper treatment, though entero-enterostomy alone may be done if there is no active process. Tuberculous appendictis was found in 29 times, with frequent infection of the lymph nodes in the meso-appendix. Tuberculosis of the tubes was found 44 times. Tuberculous peritonitis was present in 89 cases, females predominating in the ratio of 4 to 1. This is attributed solely to the frequent tubal involvment and the patency of the tube at its fimbriated end. This patency allows the escape of tubal infection into the peritoneal cavity, and if, after simple laparotomy as so often practiced, the tube does not adhere, there is re-infection of the peritoneum. On the other hand, it the tube does adhere, the process may continue locally and give rise to the pelvic masses so difficult of solution.

....As there is a definite focus discoverable in nearly every case, the rational treatment is to remove that focus. In 25 radical tubal operations the author had 25 cures. The result in appendiceal infections was not quite so good. Tuberculous peritonitis from the appendix is more likely to assume a fibro-plastic form, and is probably due to a mixed infection: such cases are apt to prove difficult for the surgeon. But radical operation has given such brilliant results as compared with the older method, that it is always advisable to seek carefully for a focus and remove it.—C. S. Oakman.

The Mortality of Appendicitis.

Barrett (Journal A. M. A., Apr. 1, 1905), draws the following conclusions after a careful study of the mortality from this disease in Chicago:

1. To decrease the mortality of appendicitis an early diagnosis is of the first consideration.
2. All troublesome appendices should be removed without waiting for an acute attack.
3. All acute cases should be dealt with surgically in the interval between the onset of appendicitis and the dangerous rupture, without waiting for pus outside the appendix, for peritonitis, for adhesions or for a possible but remote interval.
4. Cases of perforation or gangrene, with localized abscess, should be operated on with drainage or removal of the appendix, according to the judgment of the operator.
5. Cases with perforation or gangrene without a wall of adhesion are in still greater need of an outlet for the infection, to lessen the tendency of infection to travel inward.
6. Price, Murphy, Hawkes and others have shown a better percentage of recovery by the operative treatment of acute perforative peritonitis.
7. A case of acute appendicitis should be operated on at any time if the patient's condition will admit of an operation, unless the case is rapidly and beyond a question of doubt convalescing. And in this latter case we should wait until all acute symptoms have passed.
10. Lastly, life is not the only consideration. Time of cure and after conditions are important. A patient going through an acute attack without operation is saved by the adhesions. Adhesions are life-saving for the time, but they may be death-dealing afterward. The waiting treatment favors adhesions. The early operation avoids them.

Smegma Bacillus in Genito-Urinary Tuberculosis.

(Amer. Jour. Med. Sci., July, 1905.)

Young and Churchman, in an experimental study of "The Possibility of Avoiding Confusion by the Smegma Bacillus in the Diagnosis of Urinary and Genital

Tuberculosis," report two cases in which renal tuberculosis was diagnosed by stained smears from the urinary sediment, but which subsequently proved to be non-tubercular. They then review the literature in regard to the differential diagnosis of the smegma and tubercle bacilli, and finally report four series of experiments bearing on this point.

1st. A series of 24 cases. Smears from the fossa navicularis were examined for acid-fast bacilli before urethral irrigation and in 11 cases they were found. After urethral irrigation acid fast bacilli were found in one case (due to imperfect technique).

2nd. A series of 81 cases. In 7 cases centrifugalized urine was examined for acid-fast bacilli without irrigated urethra. Of these cases 3 were undoubtedly tubercular, 1 was contaminated by poor technique (this case was the same as that showing acid-fast bacilli after irrigation in Series 1)), and 70 showed no acid-fast bacilli.

3rd. A series of 50 examinations of autopsy subjects. In 36 examinations smears were made from the bladder wall in the region of the trigone, and also from centrifugalized specimens of urine aspirated from the bladder at autopsy. Of the remaining 14 cases smears from the bladder wall alone were made in 10, and of the aspirated urine alone in 4. Of these 50 cases 46 were adults and 3 children; 44 were males and 6 females. Red staining bacilli were found in 1 case of undoubted genito-urinary tuberculosis. Smegma bacilli were found in no case.

4th. Aseries of six cases in which examinations of the posterior urethra were made for smegma bacilli. In no case were they found.

They describe their technique for cleansing the head of the penis and anterior urethra, and conclude as follows:—

I. From the cases reported.

(a) It may be possible, in cases with organisms in the urine resembling the tubercle bacillus in morphology and stain, to eliminate the diagnosis of tuberculosis by any clinical feature.

(b) It may be impossible to eliminate such a diagnosis by cystoscopic examination.

II. From a review of the literature.

(a) It is impossible to distinguish positively in every case between the tubercle and smegma bacillus by any method of staining now known. All those widely tried have proved unsatisfactory in some cases, and the few with clean records have been tested too little to warrant any conclusions about them. Moreover, the striking similarity in staining properties between certain members of the smegma group and the tubercle bacillus make it seem quite likely that it is irrational to suppose that any staining method which applies to one will not, in some instances, apply also to the other.

(b) The confusion in diagnosis cannot surely be avoided by catheterization.

(c) Animal inoculation is a tedious method and this is sufficient to condemn it if an equally sure method can be provided in its place. It may, of course, be necessary when no red-staining bacilli can be found.

(d) Cultures are unsatisfactory, because of the uncertainty of the smegma bacillus to grow, and of the difficulties of growing either organism. The method is a slow one; it is liable to be unsuccessful because of contaminating overgrowth, and even when cultures have not failed we may be thrown back on staining or tedious inoculation methods to identify the organism.

III. From the examinations made.

(a) The smegma bacillus is a scant invader of the male urethra, and seldom occurs in great quantity.

(b) Its quantity in the fossa navicularis varies, habits of cleanliness aside, with the anitomical relations of glans and foreskin.

(c) It is not found in the bladder nor in the posterior urethra.

(d) It may, by simple irrigation with a special nozzle capable of being introduced down the urethra, be removed from the urethra—probably so as not to be found subsequently in scrapings from the fossa navicularis, certainly so as not to contaminate urine passed through it.

(e) The method of cleansing, by washing of the glans and irrigation of the urethra described above, gives us a sure means of eliminating, in the male, the smegma bacillus as a confusing factor in the microscopic diagnosis of genital and urinary tuberculosis.

(f) Without urethral irrigation it may be impossible to say that organisms found in the urine and taking the carbol-fuchsin stain are not smegma bacilli.

JOSEPH SILL, M. D.

NEW INSTRUMENTS AND DEVICES

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eighths inches should be sent.

Always mention the price of the article in question.

The management cannot undertake to return cuts unless postage for same accompany the letter with which they are sent.

To Our Readers—The Detroit Medical Journal publishes descriptions of such aids to the profession as it knows to be reliable and trustworthy. We shall be pleased to furnish information as to the articles mentioned, or the articles themselves, upon receipt of an inquiry.

Poisoning Case.

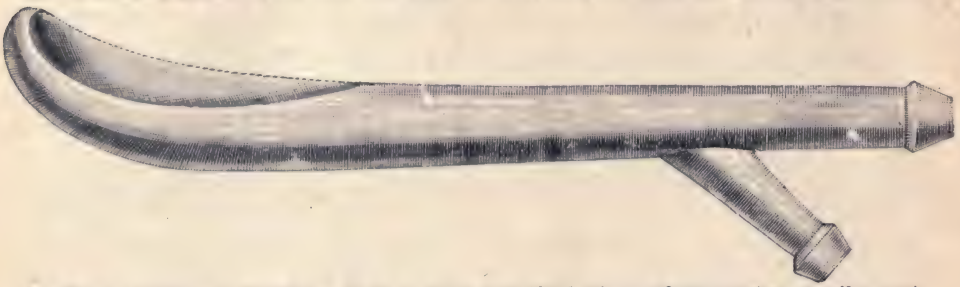
In the Medical Record for May 6th, Dr. J. W. Wainwright, of New York, describes a medical case for us in emergency poisonings. It contains stomach tube, tongue forceps, mouth gag, hypodermic syringe with seven vials, and seventeen small bottles for antidotes. It also contains a manual for acute poisoning by Wainwright, which is noticed elsewhere in this issue. The case is of black leather, twelve inches long and sells complete for $13.50.

Obstetric and Surgical Bag.

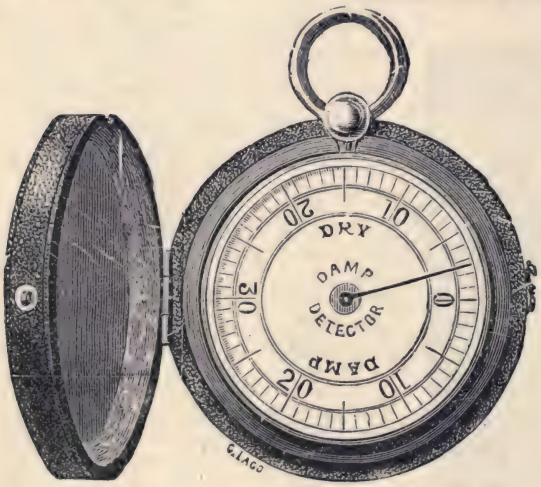
The cut of this bag is largely self-explanatory. The bag is fitted with a false bottom, making a separate compartment containing a copper sterilizer. The upper part of the bag is entirely independent of the lower part, and is fitted with six bottles. It is seventeen inches long. In black seal-grain, it sells for $12.00.

Prostatic Sound.

This Sound is for use with the Zerodone, mention of which is found in our advertising pages. By its use dry heat or cold may be used as a local application



in either rectum or vagina. It is a very practical piece of apparatus, easily portable, and very satisfactory results have been reported from its use.



Damp Detector.

This pocket hygrometer is very simple in construction and convenient to carry about. It is in a neat Morocco case.

BOOK REVIEWS

Cohen. "A System of Physiological Therapeutics." A Practical Exposition of the Methods, Other than Drug-giving, Useful in the treatment of the Sick and in the Prevention of Diseases. Edited by Solomon Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Physician to the Philadelphia and Jewish Hospitals and to the Bush Hospital for Consumption; formerly Lecturer on Therapeutics, Dartmouth Medical College. P. Blakiston's Sons & Co., Publishers, Philadelphia.

The eleventh and concluding volume of this admirable treatise upon therapeutics is devoted to the newest developments in our art of healing, serum and organs therapy, radium, X-rays, etc.

The index to the entire series is found in this volume and covers over one hundred pages arranged for facility of reference under headings of diseases and symptoms.

This index makes all parts of the entire eleven volumes readily accessible in an eminently practical way.

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart A. Hare, M. D. Published by Lea Bros. & Co.., Philadelphia and New York. $6.00 per annum.

This volume, issued by June 1, 1905. is devoted to the subjects of hernia, disease of the abdomen, gynaecology, diathetic and metabolic diseases and ophthal-

mology. W. B. Caley contributes a thorough resume of the subject of hernia, and illustrates with cuts the new autoplastic method of McArthur. E. M. Foote in the surgery of the peritoneal cavity and viscera, gives data invaluable to both surgeon and diagnostician. John C. Clark reviews at length the etiology and early diagnosis of uterine carcinoma and covers well the other new things in the gynecological field.

The articles on anemia, leukemia, and diabetes by Alfred Stengel are especially good. The volume as a whole conforms to the high standard of previous numbers.

Harrington's Practical Hygiene. A Treatise on Hygiene and Sanitation. For Students, Practitioners, Health Officers, etc. By Charles Harrington, M. D., Assistanat Professor of Hygiene in Harvard University Medical School, Boston. New (3rd) edition, thoroughly revised. In one octavo volume of 793 pages, with 118 engravings and 12 plates. Cloth, $4.25, net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1905.

The third edition of this excellent work contains considerable new material, the chief addition being a chapter on Immunity. An excellent statement of Ehrlich's "side-chain" theory is given, and a brief account of Metchnikoff's theory. Following this the practical application of these discoveries in the way of antitoxins for various diseases is given, the most complete and satisfactory general statement of this rapidly progressing branch of knowledge which we have up to date.

The volume well merits the place it has taken as the best text-book on the subject in English.

Diseases of the Heart. A Clinical Text-Book for the Use of Students and Practitioners of Medicine. By Edward H. Colbeck, London, 2d edition, 330 pages, 5x7, 43 illustrations. W. T. Keener & Co., Chicago, 1905. $2.50.

The demand for a second edition of this excellent monograph on the heart has allowed the author to insert some new material which is valuable, particularly that on the Stokes-Adams syndrome. He has failed, however, to include this in his list of the causes of slowing of the heart (p. 76). In common with its class of English monographs this publication of a separate volume on a single organ allows a much more satisfactory statement of the various conditions than the crowded pages of an encyclopaedic text-book can possibly do. The succinct chapter on Prognosis of Chronic Valvular Disease gives the following considerations to decide the question. (1) The seat and forms of the lesion, (2) mode of origin of the lesion, (3) extent of the lesion, (4) condition of the cardiac muscle, (5) state of peripheral vessels, (6) general health of the patient, (7) age, sex, mode of life, and habits of patient, (8) presence or absence of complications.

The instrumental determination of blood-pressure is disposed of in one-half a page.

Pneumonia and the Pneumococcus Infections. By Robert B. Preble, A. B., M. D., Professor of Medicine, Northwestern University. Illustrated, 211 pp. 6x4. Chicago. C. J. Head & Co., 1905. $1.25.

This monograph by Dr. Preble is an excellent one on a timely topic. The term pneumonia is here restricted and "means acute inflammation of the lungs with exudation in the alveoli as the result of infection with the diplococcus pneumoniæ of Fraenkel-Weichselbaum." The author also infers (p. 8) that he considers pneumonia a contagious disease.

The usual text-book divisions of the subject and Pneumococcus Infections, are taken up in separate chapters, those on Etiology, Various Symptoms, and Complications, being especially good.

The author urges strongly the making of blood cultures for the sake of accurate diagnosis in obscure cases, and details several instances where the method was of the greatest assistance. There is no index and no bibliography. Several illustrative charts are given.

A Manual on Acute Poisoning and First Aid to the Injured. By John W. Wainwright, M. D., New York, 96 pages, 4x6. E. R. Pelton, New York, 1905. Price, 75 cents.

This volume is of convenient pocket size and no space is wasted. A brief chapter on the general treatment of acute poisoning is followed by a list of poisons and

their antidotes and short directions for emergency cases. The book seems to fill its object admirably.

Infantile Mortality and Infants' Milk Depots. By C. F. McCleary, M. D., London, England. P. S. King & Son, London, 1905. Price, $1.50 net.

This small volume treats of the efforts to fight a high infant mortality by providing a good milk supply. It begins with a statement of the relations of infant mortality and food, and gives a historical sketch of the development of infant milk depots. A detailed account of the various methods in use in France, Belgium, England, and various cities of the United States is given. It is a remarkable interesting statement of a growing work which promises to be of great importance. To any one interested in the problem of infant mortality and the milk supply of cities, this book will bring a valuable collection of facts. The generous illustration of the book adds greatly to its attractiveness.

The Hygiene of the School-room. By Wm. F. Barry, M. D., Woonsocket, R. I. Illustrated. Silver, Burdett & Co., Boston. Price, $1.50.

The recent marked increase in attention to the medical inspection of schools has made this volume conspicuous. It is an excellent short treatise on the subject, not for the doctor, because its medical statements are pretty much common knowledge in the profession, but it is well suited for the lay members of school-boards, teachers, parents, and the public generally. Its statements are sound and sane and the book deserves a wide circulation.

The Medical Annual. A Year-Book of Treatment and Practitioners' Index. 1905. Twenty-third year. John Wright & Co., Bristol, England. Price, $2.00.

This English medical annual presents an interesting contrast to our American volumes of a similar nature. To the reviewer's mind it is a much more logically constructed book than its American contemporaries in that it is strictly a review and directory. There is a list of the new instruments and devices brought out during the preceding year; of medical books published in England; of legal decisions affecting medical men; new pharmaceutical and diatetic preparations; a general review of medicine and surgery, of therapeutics, of new remedies. In addition there is a directory of all asylums, sanatoria, and medical institutions, publications and societies, with addresses. In short, it is a medical "World's Almanac" for Great Britain, and an extremely useful volume.

RECEIVED:

(Grateful acknowledgement of the receipt of the following is hereby made. Further notice in our review column may be given).

"The Historical Relations of Medicine and Surgery to the End of the Sixteenth Century." An address delivered at the St. Louis Congress, 1904. By T. Clifford Albutt, M. A., M. D., London. Macmillan & Co., 1905.

The Universal Method of Clinical Writing by Means of Clinography. By Prof. V. Pensuti, Rome, Italy. Reprint.

A Symposium on Syphilis. By Wm. A. Hackett, M. D., and Noah E. Aronstamm, M. D., Detroit. Reprint.

A Psychological Incident in the Court Room. By T. D. Crother, M. D., Hartford, Conn. Reprint.

Mouth-Breathing. By W. H. Fitzgerald, M. D., Hartford, Conn. Reprint.

Personal Views on the Management of Typhoid Fever. By Edward C. Register, M. D., Charlotte, N. C. Reprint.

Some Forensic Problems Concerning Venereal Diseases. How the General Practioner Should Treat Gonorrhea. Advice to Gonorrheal Patients. On the Treatment of Gonorrhea, by Ferd C. Valentine, M. D.; T. M. Townsend, M. D. New York. Reprints.

The Charlatan Oculist, John Taylor; Myasthenia Gravis. By Mortimer Frank, M. D., Chicago. Reprints.

Apropos of the recent demonstrations in London in behalf of our retiring Minister, a writer in The Fortnightly Review groups together some delightfully appreciative reminiscences called "The Literary Associations of the American Embassy." The Living Age reprints them in the number for July 8.

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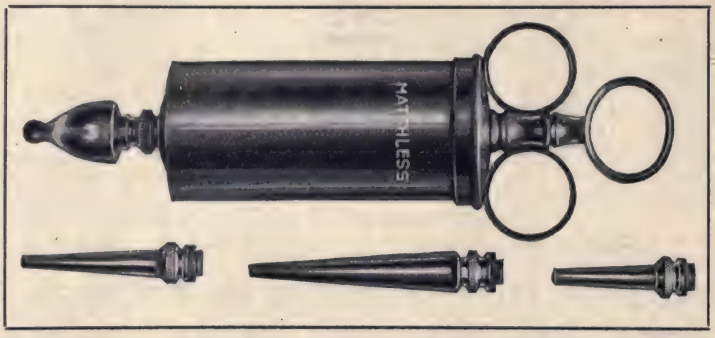

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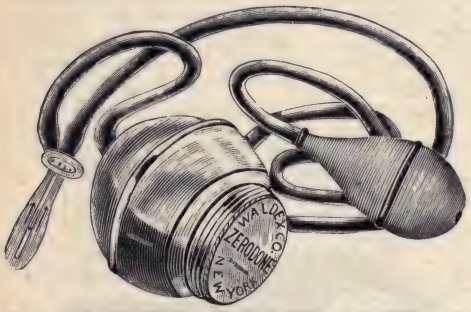

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PUBLISHER'S DEPARTMENT.

Antisepsis and Cell Stimulation.

Dr. Nicholas Senn, of Chicago, in a paper appearing in the last issue of "Surgery, Gyecology and Obstetrics, says: "The therapeutic value of Iodine as a local remedy in Surgery depends on two distinct properties of the drug: 1) It is a powerful tissue stimulant. (2) It is one of the most potent, least harmful, and most reliable of the known antiseptics. A combination of these two actions renders it an invaluable agent—both in aseptic and antiseptic surgery.

"In this connection, the following report will be particularly interesting:

A REPORT OF TREATMENT IN A SEVERE CASE OF AMBUSTION.

Recently I had under my care J. S., machinist, who was severely burned over the entire upper trunk, neck and arms, due to the explosion of a gasoline tank.

He was taken directly to Harper Hospital, where the injured area was dressed with gauze saturated in Normal Saline. Daily dressings were imperative for the first ten days.

On account of the devitalized condition of the injured surface, there was considerable suppuration and sloughing, making the removal of the dressings extremely painful to the patient, and at the same time difficult for the operator.

It was for this reason that we decided to use some other remedial agent which could be spread upon gauze; something possessing antiseptic, sedative and stimulating qualities.

SULFODINE was suggested.

The dressing consisted of SULFODINE 10 per cent, incorporated in Lanolin spread evenly upon sterile gauze and applied to the injured skin.

Almost immediately following the initial application, pain and irritation (the most troublesome symptoms) disappeared. The dressings were reapplied every second or third day, depending upon the temperature curve and comfort of the patient.

The patient was discharged from the hospital at the end of six weeks entirely recovered.

The following advantages of Sulfodine Ointment throughout the treatment of this case are summarized below:

First—Ease of application and removal.

Second—Antiseptic to a high degree.

Third—Stimulation of cell proliferation without irritation.

Fourth—Its marked and analgesic and sedative effect upon sensitive and denuded cutaneous surfaces. JNO C. DODDS, M. D.

369 Field-ave., Detroit.

The Chemical Products Co., manufacturers of Sulfodine and it's derived products, wish to announce that they have recently issued a little book, setting forth the characteristics, indications and preparations of these purely ethical products, and that they will be most pleased to forward the same, with whatever samples are desired to the address of any physician making the request.

A New Catalog

has been issued by the McIntosh Battery and Optical company, 39 West Randolph-st., Chicago. It contains nearly 200 pages, is well illustrated and a very handy book of reference. Sent free on application.

Ochsner says: "If the ununited fracture is in the lower extremity, it is wise to apply an Ambulatory Pneumatic Splint, so that the patient will be enabled to walk upon the extremity within a few days after the fracture has been ad-

justed. It seems that better results can be obtained in this way than where the patient is required to be quiet for a number of weeks."

"So you have decided to get another physician."
"I have," answered Mrs. Cumrox; "the idea of his prescribing flaxseed poultices and mustard plasters for people as rich as we are!"—Exchange.

Quite right. If he had been up to date, he would have used Antiphlogistine, whether his patients were rich or poor.

Perfect Nutrition as a Vital Incitant In Tempory Asthenia.

As an agent for exciting cell activity and promoting the normal reconstructive functions in temporary stages of vital depression, following exhaustive fevers, acute infections or depressions from overwork, both mental and physical, Bovinine, in my hands, has given the most excellent results. In many cases where no actual pathological lesion could be deducted, but where cell activity was below par and some powerful incitant and nutriment was urgently needed to place the patient upon a good fighting basis, where he could resist infection and overcome the sequellae of cell exhaustion, the results obtained were both prompt and marked. The following brief case in point:

Miss N., aged 29, stenographer, who had become anaemic and physically depressed from close application to her vocation, came under my care last March. She had not menstruated for over two and one-half years, had lost nineteen and one-half pounds in that time and suffered from a special hyperesthesia and insomnia. On careful examination, no distinct pathological condition could be induced except the blood impoverishment. She had been under treatment for two years and during that time had taken the various forms of iron, arsenic, hydropathy, electricity, etc., until she abhorred doctors and medicines and was in a fair way to become a fit subject for Christian Science. Her principal worry was that she would develop tuberculosis. She was put on Bovinine in tablespoonful doses, every two hours, being given in milk and kept on this dosage for two weeks, when the quantity was increased to a wineglassful every two hours. Since then she has steadily improved and at the present time, she shows a gain of twelve and one-half pounds; is rosy, cheerful and confident of the future. Though brief, this clinical citation, I think, has some points of genuine interest for the professional mind.—Dr. F. N. Pampinella, Philadelphia, Pa.

There seems to be no limit to the development of Local Anaesthesia, not merely in cases of minor surgery, but, as is shown by the following, from Dr. F. R. Bernard, Lake Providence, La., it has an indispensable place in major surgery, giving most excellent results when a carefully prepared and reliable solution is used.

Believing that he owes it to the profession, Dr. Bernard says: "I amputated a leg for a man seventy-seven years old, without the least pain, by using Dr. R. B. Waite's Antiseptic Local Anaesthetic. Heart disease prevented the use of a general anaesthetic. The operation was a perfect success."

Dr. R. B. Waite's Local Anaesthetic is sold by all dental houses and prominent druggists throughout the world. It is manufactured by The Antidolar Manufacturing Company, Springville, Erie county, N. Y. Their advertisement appears in this Journal, and contains a special trial ounce offer.

Words of Appreciation.

The following letter, relating to the treatment of opium and other addictions, will interest many. It is addressed to 'our old friends, The Antikamnia Chemical Company,' and reads:

"Gentlemen—Illness, dating from the very day of my former letter, must be my plea for my silence and my seeming indifference to your courtesy, and your exceptional kindness in sending me your little 'Vest-Pocket-Box.' I want you to feel that I sincerely appreciate your goodness in this little matter. I am in charge of The Woolley Sanatorium, an institution conducted exclusively for the cure of opium and other drug addictions, and am using Antikamnia Tablets extensively after withdrawing morphia, and I am free to say that I do, in reality, regard your product as 'A Succedaneum for Morphia.'

"Our institution is probably the largest of its kind in the south, and if my views should prove of value to you at any time, command me, and use them as you wish."—Marion T. Davis, M. D., University of Maryland School of Medicine, Atlanta, Ga., April 15, 1905.

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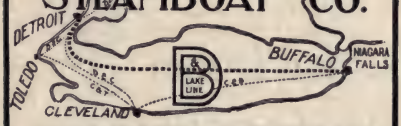

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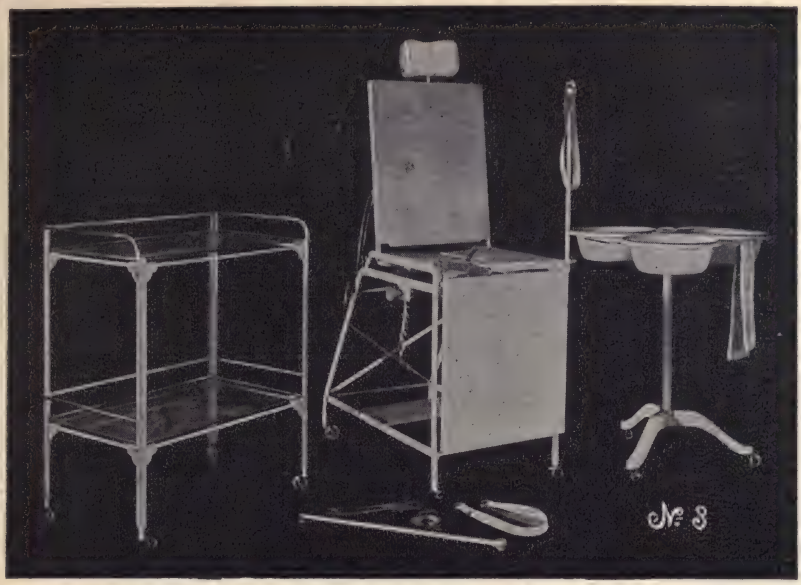

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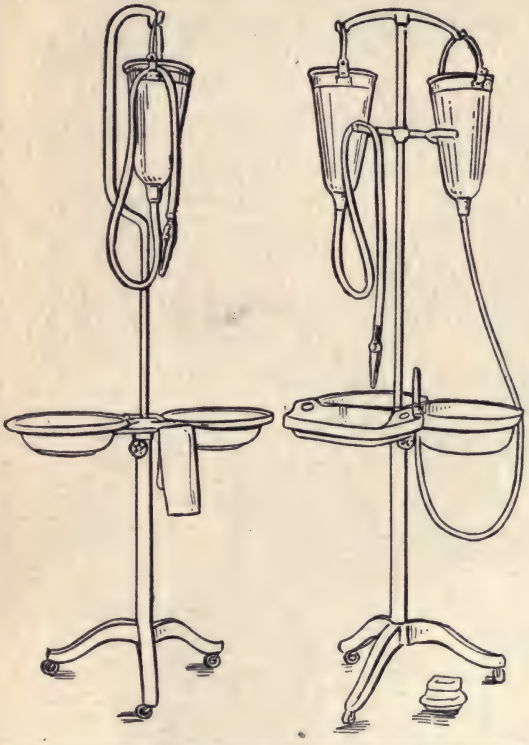

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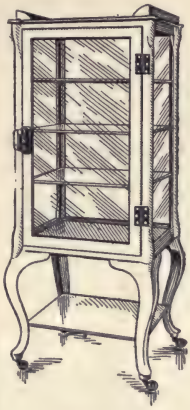

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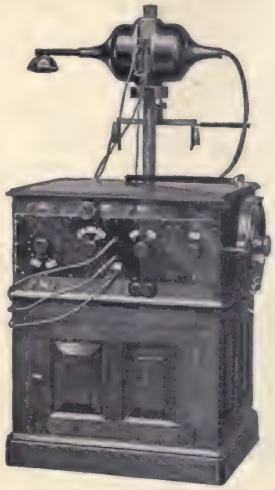

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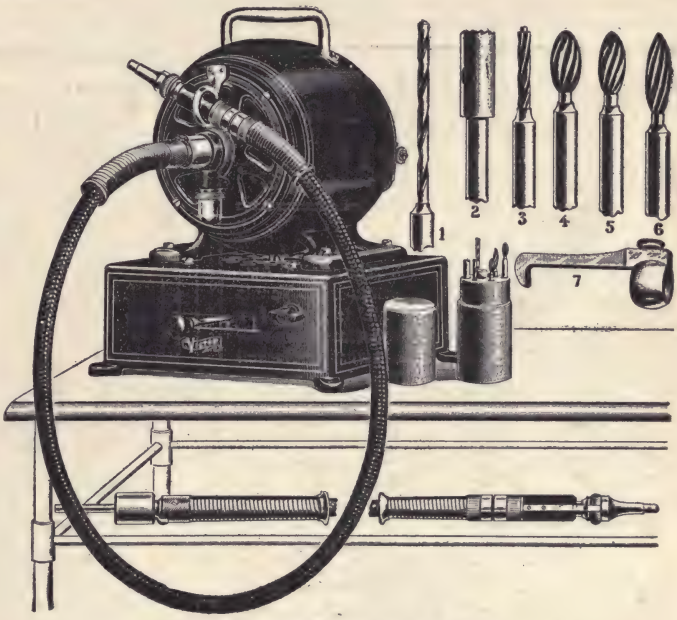

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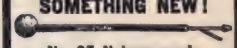

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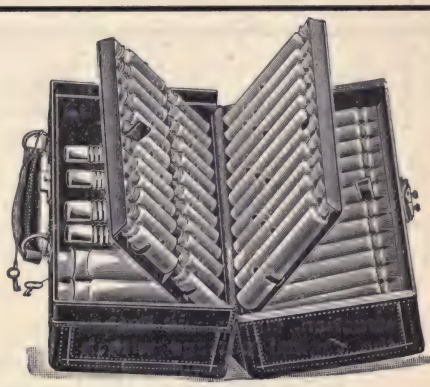

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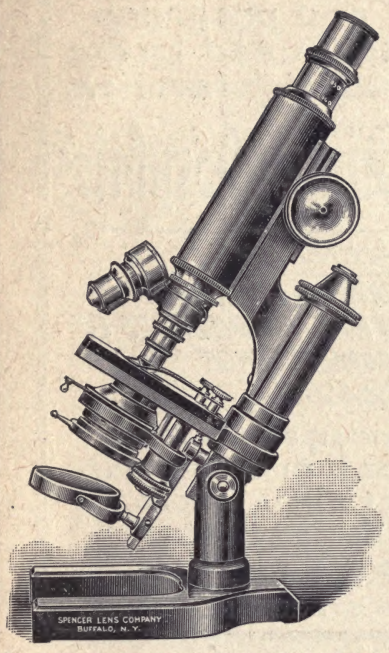

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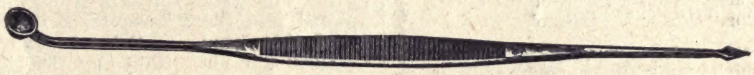

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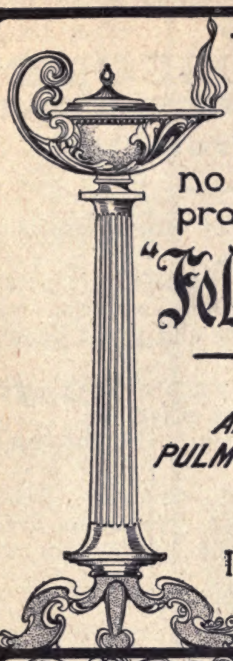

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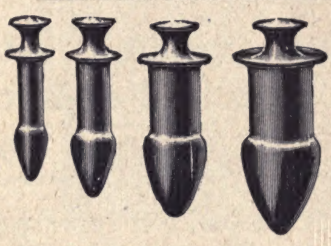

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